ADOLESCENCE EDUCATION IN SCHOOLS

PART - II

# ADOLESENCE EDUCATION : KNOWLEDGE BASE



*JAWAHARLAL PANDEY*
*SAROJ B. YADAV*
*KANAN K. SADHU*



विद्यया ऽमृतमश्नुते
एन सी ई आर टी
NCERT

NATIONAL POPULATION EDUCATION PROJECT
DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES AND HUMANITIES
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
SRI AUROBINDO MARG, NEW DELHI-110 016

# ADOLESCENCE EDUCATION IN SCHOOLS

PART - II

# ADOLESENCE EDUCATION : KNOWLEDGE BASE

*JAWAHARLAL PANDEY*
*SAROJ B. YADAV*
*KANAN K. SADHU*

NATIONAL POPULATION EDUCATION PROJECT
DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES AND HUMANITIES
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
SRI AUROBINDO MARG, NEW DELHI-110 016

July, 1999 Shrawana, 1921
NPEP 05T



(A Publication under NPEP funded by UNFPA)



Published by Secretary, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi-110 016; Lasertypeset at Shivangi Prakashan, 150/2, Govindpuri (Kalikaji), New Delhi-110 019. and printed at

Bright Services 1810/3/B, Gyani Bazar, Kotla Mubarakpur, New Delhi-3

# CONTENTS

# FOREWORD

The introduction of adolescence education in schools is one of the major thrusts of the National Population Education Project during its current phase which began in 1998. Adolescence education has emerged in response to the critical needs and concerns of adolescent development which is a complex process of physical, cognitive, emotional, social and moral maturation of individuals from childhood to adulthood. Although the school curriculum accepts the criticality of adolecent years in preparing the children for adult roles in almost all aspects of life, it has not adequately addressed so far the crucial needs and concerns of adolescents related to the process of their growing up from childhood to adulthood.

It was in response to these needs that the National Seminar on Adolescence Education organized by the National Council of Educational Research and Training (NCERT) in April, 1993 recommended the introduction of adolescence education in schools. As a follow-up of the recommendation of the Seminar efforts are afoot to integrate elements of adolescence education in the content and process of school education. However, the introduction of adolescence education in the school curriculum has been inhibited owing to apprehensions on the part of educators and parents regarding the socio-cultural sensitivities of certain aspects of its subject-matter.Absence of a suitable pedagogy for transacting these elements effectively has also been a deterring factor.

The present publication, ***Adolescence Education in Schools : A Package of Basic Materials,*** deals with some of the critical issues that have been raised in this respect. It seeks to promote the process of introduction of adolescence education in school education. The package contains ***five parts*** and a small booklet introducing the package. Whereas each ***part*** is addressed to a particular intended audience with certain specific objectives, the entire package aims at delineating the general framework of adolescence education and outlining its content areas in the context of Indian socio-cultural milieu. It also makes an attempt to indicate how different intended audiences would be oriented in this educational area, how classroom transaction may be made more effective, how the partnership between the school and the community may be made

more functional and how both curricular and co-curricular approaches of curriculum transaction may be employed to attain the objectives of adolescence education.

This package is the outcome of wide consultations at different levels. As a follow-up of the recommendations of the National Seminar, a draft of the package was developed and reviewed in the Regional Seminars on Adolescence Education, organized in different parts of the country. These consultations were helpful in not only improving the quality of the material but also evolving a consensus on the general framework of adolescence education as well as strategies and modalities of curriculum transaction. The NCERT is extremely grateful to all the policy makers, senior educational functionaries, eminent educationists, psychologists, medical specialists, curriculum framers, teacher educators, teachers, parents and students who contributed to the process of the finalization of this package.

I take this opportunity to express my sincere thanks to the United Nations Population Fund (UNFPA) for its cooperation in the development of this package and also in its publication. I am also thankful to international agencies like UNESCO, UNICEF, UNAIDS and WHO for their technical inputs provided on different occasions towards the design of this package.

I thank Professor Arjun Dev, Head of the Department of Education in Social Sciences and Humanities, NCERT for providing encouragement to his colleagues in finalizing this package.

I am particularly thankful to Dr. J.L.Pandey, Project Coordinator and his colleagues in the National Population Education Project, Dr.Saroj B. Yadav, Reader and Dr. Kanan K.Sadhu, Lecturer, who planned this package, prepared its first draft and finalized it in keeping with the comments and suggestions received from different sources in the development of this important curricular area.

I hope this publication will strengthen the efforts that are being made to introduce adolescence education in schools. We would welcome comments and suggestions on any aspect of this package for its improvement.

A.K.Sharma
Director
N.C.E.R.T.
NewDelhi

June 1999

# ACKNOWLEDGEMENTS

The development and publication of ***Adolescence Education in Schools : A Package of Basic Materials*** has been a challenging task, which could not have been accomplished without the contribution of a number of individuals. It is very difficult to enumerate all such contributions individually.

First and foremost, the comprehensive comments on the draft of the General Framework of Adolescence Education by Mr. O.J.Sikes, Chief, Education, Communication & Youth Wing, Technical and Evaluation Division, UNFPA, New York and Dr.R.C.Sharma, the then Senior Advisor, EPD,UNESCO, Paris contributed immensely to its improvement.

Dr. Daphne M. de Rebello, Regional Advisor, CST, Kathmandu extended her technical support during the process of the review of the package.

Faculty members of All India Institute of Medical Sciences (AIIMS), New Delhi, Indian Council of Medical Research (ICMR), New Delhi, and National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bangalore, also provided their extensive comments on different aspects of the package.

Shri Nasiruddin Khan, Reader, DESSH, N.C.E.R.T. edited the manuscript. Shri A. Chakraborty, formerly Lecturer in Arts, N.C.E.R.T. prepared illustrations and Miss Kiran Pahwa and Mrs. Kiran Juneja typed the entire package on Computer and prepared its final printout.

## PLEASE NOTE ...

This is an **EXPERIMENTAL EDITION** of the Package of Basic Materials on Adolescence Education. Materials contained in it have been prepared in pursuance of a strategy to strengthen the positive social and cultural values of Indian society pertaining to reproductive health. We all know that our society has a large variety of cultural settings, and any material developed at one level may not adequately take care of the needs of all of them. In order to make the package more relevant and functional some of its portions will need adaptation at different levels to meet the reproductive health needs of adolescents belonging to the concerned cultural setting.

# ABOUT THE PACKAGE

This publication, ***Adolescence Education in Schools : A Package of Basic Materials,*** is the outcome of efforts made as a follow-up of the recommendations of the **National Seminar on Adolescence Education** organised by the National Council of Educational Research and Training (NCERT), New Delhi in April, 1993. The main purpose of developing this material is to promote the process of introduction of adolescence education in the school curriculum. The package consists of the following five parts :

| | | |
|---|---|---|
| Part I | : | **Adolescence Education : General Framework** |
| Part II | : | **Adolescence Education : Knowledge Base** |
| Part III | : | **Adolescence : Questions and Answers** |
| Part IV | : | **Studens' Activities** |
| Part V | : | **Adolescence Education : Role of Adults** |

Part I delineates the theoretical framework of adolescence education and contains the details of the scheme of content with suggested modalities to integrate the contents into the existing syllabi and textbooks of various school stages and courses of pre-service and in-service teacher education. Part II explains the main contents of adolescence education. It deals with facts, ideas and views in respect of adolescent reproductive health, focusing on physical, psychological and social developments during the process of growing up, the changing inter-personal relationships of adolescents and the critical issues of gender roles. It also provides specific treatment of HIV/AIDS and drug abuse. Part III makes an attempt to provide answers to some important questions that arise in the minds of adolescents more often than not. Part IV delineates various aspects of the process of conducting important students' activities. The details of nine activities are included in this Part. Part V contains material which can be used in advocacy programmes for various target groups, though it is addressed to teachers and parents.

The present package draws heavily upon the materials developed and published by various national and international organizations, the package on **Adolescence Education,** published in 1991 under Population Education Programme Service by the UNESCO Principal Regional Office for Asia and the Pacific, Bangkok being its mainstay. The portions of the package dealing the HIV/AIDS have been repackaged from **AIDS Education in Schools : A Training Package,** published jointly by NCERT and National AIDS Control Organisation (NACO), New Delhi. However, the materials drawn from different sources have been adapted and reformulated to suit the requirements of the school education curriculum and the cultural ethos of Indian society. The first draft of the package was thoroughly reviewed in three Regional Seminars on Adolescence Education.

It is hoped that the package will be useful and effective in facilitating the introduction of adolescence education in the school curriculum. Any material of this nature pertaining to a sensitive area like Adolescene education requires continuous efforts towards its revision and improvement. Suggestions and comments on the package will be greatly appreciated.

# PROCESS OF GROWING UP

# ADOLESCENCE : PROCESS OF GROWING UP

Growing up is a natural process. Human beings like every living being undergo certain changes at various stages of development. These development stages are infancy, childhood, adolescence, adulthood and old age. Amongst these, adolescence is a critical stage of growth and development. The word adolescence is derived from Latin term *adolescens* which means *growing up or growing toward*. It is a significiant phase of transition from childhood to adulthood.

## Definition of Adolescence

Adolescence is generally defined with reference to a period of years. Many of the Development Psychologists consider it a period between 13 and 18 years of age, while some of them put it between 10 and 19 years and yet others extend it up to 24. But adolescence may not be seen only in association with the precise number of years, as its periodicity varies from person to person. It can start as early as at the age of 9 and as late as 14. Moreover, defining the age of adolescence varies from one socio-cultural setting to another. A young person attending school may be considered an adolescent in one place, while another person of the same age in another place may be married and considered an adult. Adolescence, therefore, may appropriately be defined as the period of physical, psychological and social maturation from childhood to adulthood, the period extending from puberty to the attainment of full reproductive maturity.

## Characteristics of Adolescence

Any period of life tends to be characterized by physical, psychological and social developments specific in origin and timing to that period. But the period of adolescence, more than any other, is characterised by an upsurge of changes and behavioural contradictions. The following significant characteristics of adolescence make this phase of life distinct from all other phases.

## Physical

It is during adolescence that rapid physical growth and changes in physiological processes take place. Arising from the hormonal changes these developments produce reproductive maturation in individuals. These are highly co-related with the sexual development. It is a period exclusively identified with the development of secondary sexual characteristics.

## Psychological

Adolescence is also a period of progress towards mental, intellectual and emotional maturation. An adolescent displays a tendency to be independent like an adult, rather than remaining dependent on others like a child. During this period individuals experience intense sex drive for the first time and begin to define and understand their relationship with the opposite sex. It is presumed to be a psychologically stressful and critical period.

## Socio-Cultural

The interaction of adolescents with the existing socio-cultural milieu results in some new developments. It initiates a process of redefining their social relationships. Society generally does not define a distinctively definite role for adolescents. And hence, they are caught in the ambiguous overlap between the categorically defined roles of childhood and adulthood. Their psychological needs also are not appreciated in proper perspective by the society. This, at times, generates among them aggressive and reactionary behaviour, which many a time is socially disapproved. Individuals during adolescence experience anxiety or emotional stress to an unusual degree compared with other age periods.

## Behavioural

In view of the above developments, adolescents reflect the following characteristics in their behaviour patterns:

(a) **Independence :** The process of physical, psychological and social maturation initiates among adolescents a tendency to be independent. They start distancing themselves from the adult world. They begin to shift from parents to peers and from existing to new belief systems. In societies where adolescence is prolonged, the adolescents tend to form ***subcultures*** to support their striving for independence. These ***subcultures*** gradually influence the existing culture of the society.

(b) **Identify :** Adolescents struggle to define themselves and in the process tend to assert their individuality. They display the gender role identity, a positive body image and a sense of esteem and competence through their behaviour.

(c) **Intimacy:** During adolescence, some basic changes occur in defining relationship, particulalrly in the area of heterosexual relations. Adolescents suddenly discover their special interest in the opposite sex. Invariably they find it difficult to distinguish between infatuation and love with or without sexual orientation. They tend to feel sex urge for physical pleasure and satisfaction and do not generally appreciate its sublime orientation.

(d) **Peer Group Dependence:** In an effort to assert their identity and show their independence, adolescents tend to break away from the close emotional ties of parents and prefer the company of their friends. Wherever the socio-cultural milieu does not permit interaction between boys and girls, adolescents of each gender group develop *"homo-social"* orientation and form gender-specific peer groups. While at home, they often prefer being alone and demonstrate their obstinate inclination for privacy. These developments promote their dependence on peer group, from which they derive approval and support for their changed behaviour pattern.

(e) **Intellect:** The development of intellectual capacity in adolescents is also reflected through their behaviour.They become capable of conceptual thinking and of understanding logic and deductive reasoning. All these result in the heightening of the self-esteem in them.

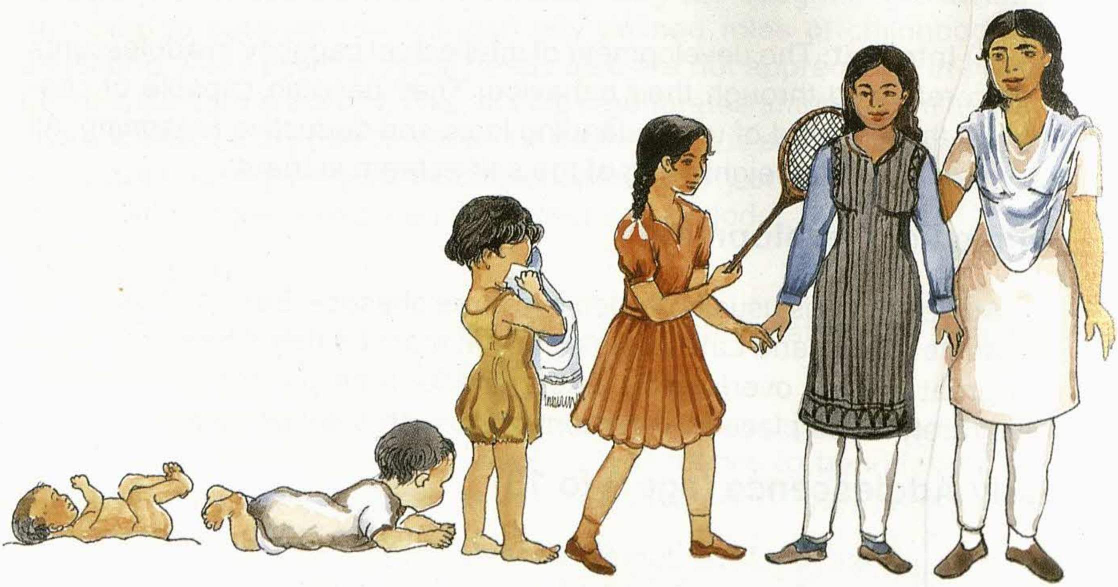
## Phases of Development

Adolescence is usually divided into three phases—Early adolescence, Mid adolescence and Late adolescence. It must be noted here that there is a great deal of overlapping among these three phases, as development rarely takes place in strict conformity with a set of norms.

## Early Adolescence (age 9 to 13)

This phase of development is also known as pre-adolescence period. The age between 9 and 13 is considered the early adolescence period. The spurt in phsycial growth during the pre-adolescence period is

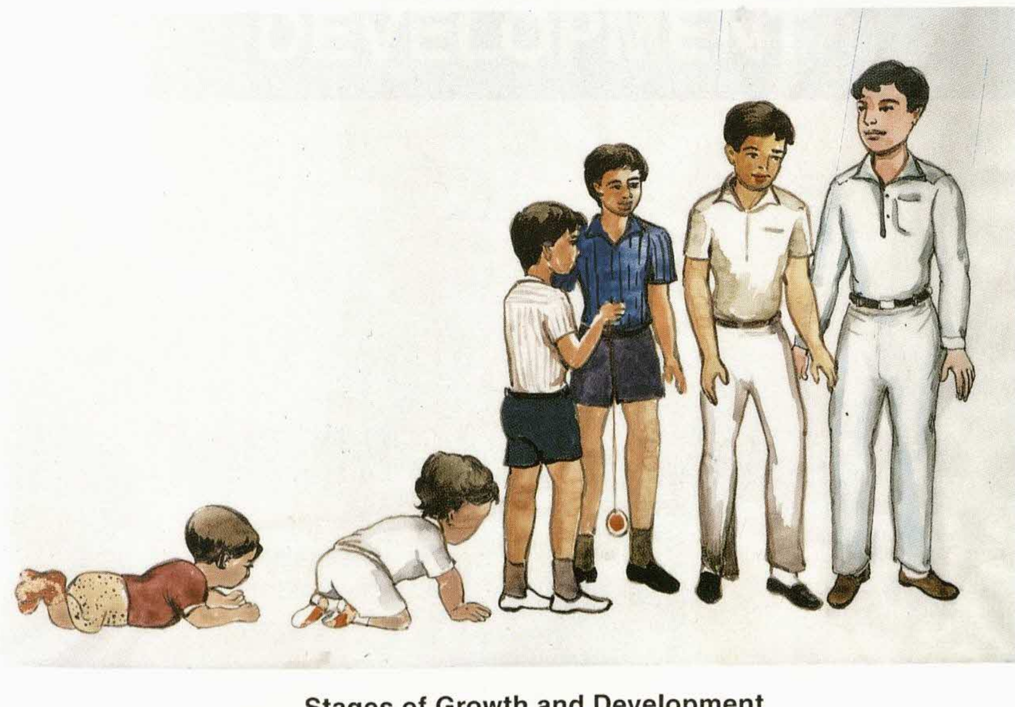
both sudden and distinct. This spurt may occur differently in different individuals. The long bones of the arms and legs grow with great speed and the gain in height can be as much as eight to nine inches in a year. Gender differences in height may be seen at this time. Girls during this period (the only time in the growth span) are taller and slightly heavier than boys. Gain in weight occurs, but this in general does not keep pace with height gains. During this phase, adolescents experience a period of rapid social development and an increase in their own sexual development gathers momentum. They strive to move in peers. 'Best friends' become very important at this stage. Boys form groups of the same age, while girls have just one or two special friends. Sexual fantasies and other sexual manifestations start at this stage. Some parents do not accept this as normal behaviour and make the adolescents feel guilty. Adolescents at this stage of development are generally confused and preoccupied with body wonders.They try to find some balance between sexual impulses and socio-cultural limitations. In early adolescence, development centres mainly around the need to change self-image as a result of psychological changes.



**Stages of Growth and Development**

## Mid-Adolescence (age 14 and 15)

This phase of adolescence is characterized by further development of physical, emotional and intellectual capacities. The secondary sex characteristics continue to develop and the reproductive organs become capable of producing ova and sperms. During this phase, adolescents continue efforts to establish their separate identity from parents, often become idealistic and at the same time interested in exploring sex. Usually, this phase of development is a time for experimentation in the spirit of adventure. An adolescent starts defining his/her relation to himself/herself, the opposite sex and peer groups. About this time there appears a sense of self dependence accompanid by a feeling of responsibilities among them. Adolescents during this phase of development want to know their place in society and also wish to contribute to it. Mental organization becomes more complex, emotions become deeper and intenser and there is a sense of finality in choices.



**Stages of Growth and Development**

## Late Adolescence (age 16 and above)

In late adolescence period the secondary sex characteristics are well developed and the sex organs are capable of adult functioning. Adolescents have more or less a stable sense of their own identity and place in society. They establish a set body image and arrive at a farily consistent and realistic view of the outside world. Peer groups become less important for them; rather, they become more selective about friends. Adolescents by this time are able to define life goals, although economic dependence on parents may continue for many years. Adolescents during this plase develop a more consistent framework of values, morals and ethics and are able to think abstractly.

Unlike children, adolescents have had time to absorb a body ot information that enables them to envision more accurately what life holds in store. They are concerned with the preparation for the future. They, however, require a system of graded support from parents and society that will enhance the gradual development of their powers to cope with the roles they are expected and ready to play.

# PHYSICAL GROWTH AND DEVELOPMENT

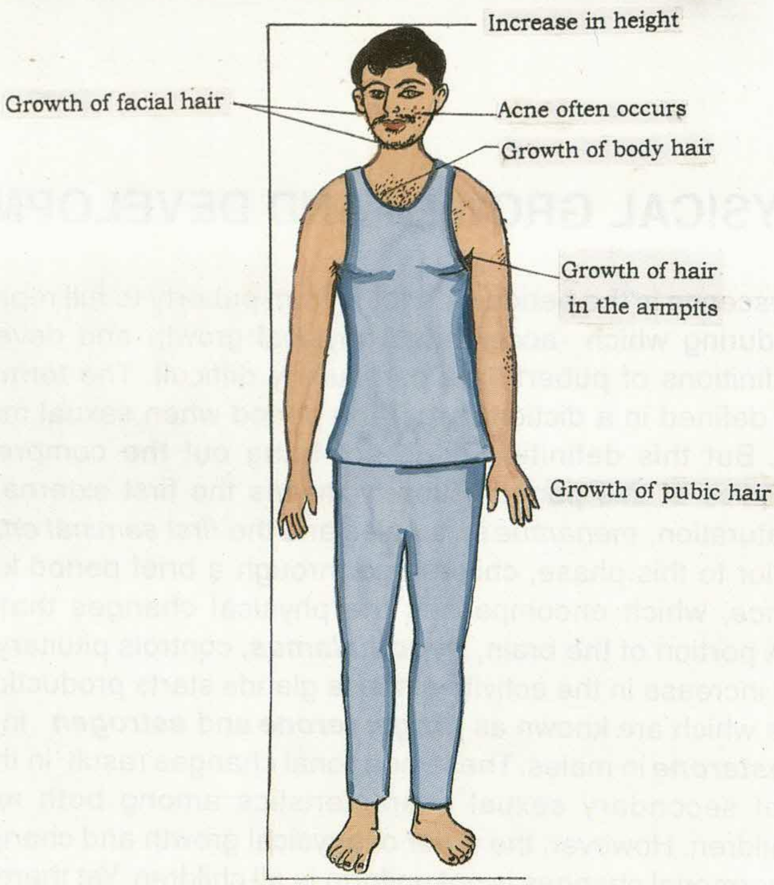
# PHYSICAL GROWTH AND DEVELOPMENT

Adolescence is the period extending from puberty to full reproductive maturity, during which accelerated physical growth and development occur. Definitions of puberty are particularly difficult. The term puberty has been defined in a dictionary as "the period when sexual maturity is reached". But this definition does not bring out the comprehensive characteristics of this period. Puberty means the first external sign of sexual maturation, *menarche* in females and the *first seminal emission* in males. Prior to this phase, children go through a brief period known as *pubescence*, which encompasses the physical changes that lead to puberty. A portion of the brain, ***hypothalamus,*** controls pituitary glands. A sudden increase in the activity of these glands starts production of sex hormones which are known as ***progesterone*** and ***estrogen*** in females and ***testosterone*** in males. These hormonal changes result in the development of secondary sexual characteristics among both male and female children. However, the order of physical growth and changes arising from hormonal changes is not uniform in all children. Yet there is some sequence of physical changes for both male and female, which may be viewed in the mode of the Body Clock, both male and female.

## The Male Body Clock

### Puberty

Generally the onset of puberty begins between age 10 and 11. The sequence of pubertal maturation is predictbale, but the rate at which the events occur is highly variable. The onset of puberty is consistently 2 years later in boys than in girls. It ranges from age 9.5 to 15. Girls reach full height about 2 years before boys. In the year in which a boy grows the fastest he normally adds 3 to 5 inches to his height. An average boy of 16 has already reached 98 per cent of adult height.




**Physical Changes During Adolescence (Male)**

## Seqence of Changes

### (i) Growth of Testes and Scrotum

The onset of puberty is marked by the initial enlargement of the testes. The growth of testes and scrotum usually begins between the age 10 and 13.5 years. The development continues through most of puberty and is completed sometimes between the age 14.4 to 18 years. Along with increasing growth of the testicles, reddening and wrinkling of scrotal skin occurs. The testes are the male reproductive glands and produce sperms and the male hormones. However, with the onset of puberty the testes do not contain all the sperms that are produced. They are a conglomerate of solid threadlike cords called ***"somniferous tubules"*** without sperm. During puberty, these tubules increase in size and the

cells in the lining of the tubules pass through a succession of stages. From puberty on, the testes continuously produce sperms generating billions in the course of an adult lifetime. The decline in testicular function is far more gradual than ovaries in terms of both sperm and hormone production.

### (ii) Straight Pubic Hair

The appearance of pubic hair is usually an early event of puberty. It occurs between the age 10 and 15 years. A prepubescent boy may have some finely textured hair but not true pubic hair. Later, long strands of slightly curly hair appear at the base of the penis. Pubic hair becomes darker, coarser and more curly as it spreads over the scrotum and higher up the abdomen. Straight pubic hair appears before the first ejaculation, but pubic hair becomes kinky after this milestone is reached. The first ejaculation usually occurs about a year after testicular growth. The average age for first ejaculation is 14.6 years.

### (iii) Growth Spurt

The growth of penis occurs normally between the age 10.5 and 14.5 years. The age for completion of this growth ranges from 12.5 to 16.5 years. A late developer may begin to wonder whether he will ever develop his body properly or be as well endowed sexually as those whom he has seen developing around him. He needs support and reassurance.

The spurt in height occurs relatively later in boys than in girls, between age 11 and 13 years. During these years girls are normally taller and heavier than boys. But during the early teens, most boys start growing rapidly and the rate of growth in girls declines. After about the age of 14 on an average boys are heavier and taller than girls.

### (iv) Voice Change

One of the significant developments during adolescence among boys is the deepening of the voice which results from the enlargement of the larynx. The larynx is a muscular and cartilaginous structure lined with mucous membrane at the upper part of the track in which the vocal cords are located. The deepening of the voice occurs relatively late in adolescence and it is often a gradual process.

### (v) Underarm and Coarser Body Hair

The underarm and coarser body hair generally appear a couple of

years after the growth of pubic hair. This change is accompained by increased body and facial hair.

**(vi) Oil and Sweat Glands**

The oil and sweat glands are activated and this occurrence leads to the development of body odour and the apperance of acne. Body odour and acne are common concerns for many adolescents. Increased production of ***androgen*** hormones in both sexes leads to an increase in skin thickness and stimulates the growth of ***sebaceous glands*** (small glands in the skin, which produce oil). These small glands grow rapidly, resulting in clogged pores, inflammation and infection, and the appearance of blackheads and pimples.

**(vii) Facial Hair**

This is an important event because of its social implications as a symbol of manhood. Facial hair begins to grow at about the time the axillary hair appears. There is a definite order in which the facial hair (moustache and beard) appear. To begin with the facial hair grow at the corners of the upper lips. Then these spread to form the moustache over the entire upper lips. This is followed by the apperance of hair on the upper part of the cheeks and the area under the lower lips. These eventually spread to the sides and lower border of the chin and the rest of the lower face.

## The Female Body Clock

**Puberty**

Puberty among girls begins between 8 to 12 years of age and ends around 16 years of age. It takes approximately 3 to 5 years to complete this stage of growth. The onset of puberty is consistently 2 years earlier in girls than in boys. Girls reach their full height about 2 years earlier than boys. It is important to note that females are born with slightly more mature skeletons and nervous system. This development lead gradually increases throughout their childhood. Earlier physical maturation of females is one reason why males are usually taller as adults. By vitrue of maturing later males have more time to continue growing.

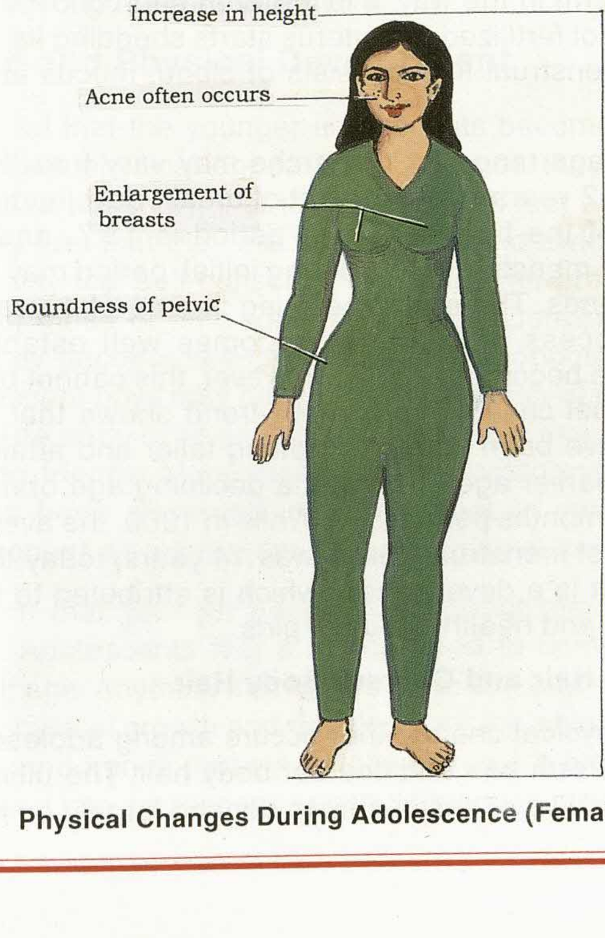
## quence of Changes

### reast Budding

With the onset of puberty the breast development begins among girls. starts between 8 and 13 years and is completed between 13 and years. This development has a psychological importance to young ales and hence, at times, they may worry about its size and shape. It portant to note that it is not unusual for one breast to develop faster the other and the development process differs from person to per- An adolescent girl may worry about the asymmetry that results, es- ially if she does not know that the difference is usually corrected by ime the development is completed.

### rowth of Bony Pelvis

Girls have a wider pelvic outlet by birth, so that the natural adaptation hild bearing is present in them from the very early age. The growth e bony pelvis primarily involves the widening of the pelvic inlet and idening of the hips.




Physical Changes During Adolescence (Female)

### (iii) Growth Spurt

The growth spurt among girls usually starts at about 10 years of age and peaks at 12. It ends at around 14 years of age. Any further noticeable growth in stature stops at 18. At the end of the growth the average girl of 14 years has already reached 98 percent of her adult height.

### (iv) Pubic Hair

Pubic hair begins to grow between 11 and 12 years of age and the growth is completed by 14. Kinky pubic hair appears after the period of maximum growth in height. This development indicates that the first menstruation is approximaetly 6 months to 1 year away. Axillary hair appears some 2 years after the beginning of pubic hair growth.

### (v) First Menstrual Period or Menarche

The menstruation is a monthly event that happens in every woman. it is a normal function of a healthy female body. The ovaries produce ova (egg cells). An ovum matures and ripens every month and is released by the ovary. The ovum travels down the fallopian tubes into the uterus. If it meets with sperm in the way, it is fertilized and conception takes place. But when it is not fertilized, the uterus starts shedding its lining and blood flow begins. Menstrual flow consists of blood, mucus and fragments of lining tissues.

Generally age range for menarche may vary from 9 to 18 years. It usually begins 2 years after the start of breast development. In India the average age of the first menstrual period is 13.7, and it is gradually advancing. The menstrual cycle during initial period may be more irregular than later ones. There may be a lag in time of 1 year to 18 months before the process of ovulation becomes well established and the menstrual cycle becomes regular. However, this cannot be relied upon in certain individual cases. The present trend shows that the successive generations have been generally getting taller and attaining puberty at progressively earlier ages. There is a declining age of menarche at the rate of about 4 months per decade. While in 1900, the average age (world over) for the first menstrual period was 14 years, today the average age is 12.8 years. It is a development which is attributed to factors such as better nutrition and health status of girls.

### (vi) Underarm Hair and Coarser Body Hair

Another physical change that occurs among adolescent girls is the growth of underarm hair and coarser body hair. The ultimate amount of body hair an individual has seems to depend largely on heredity.

### Oil and Sweat Production Gland

The activation of glands cause the apperacne of acne and development of body odour among girls, as explained in the section on Male Body Clock.

### Completion of the Growth of Uterus and Vagina

Although the growth and development of uterus and vagina start early, their growth is the last to be completed. The musculature wall of the uterus becomes larger and elaborate. This is designed to accommodate foetus during pregnancy as well as to expel it during childbirth. Cyclical changes occur in its lining known as ***endometrium.*** The vagina becomes larger and its lining grows thicker. Vaginal contents which are alkaline at the beginning of puberty becomes acidic at this stage. At birth, the ovary is a fairly complete organ. It contains about half a million immature ova, each one capable of becoming a mature egg. The female is born with all of the eggs she will ever have (usually 4,00,000 eggs).These follicles remain immature until puberty when ovulation begins. At puberty, the follicles start maturing into eggs in monthly cycle.

## Adolescence and Physical Development

It is observed that the younger adolescents become intensely concerned about their physical appearance. At times they may think that they are too tall or too short, that their hands and feet are too big or too small. They may feel that they are unattractive and awkward. A girl who matures early may feel self-conscious because her breasts are noticeably larger than those of other girls of her age. Conversely, a girl who matures late may become self-conscious for the opposite reason. Late maturing adolescent boys may have a poorer opinion of themselves than those who mature early or at an average rate. They may also have more difficulty making friends. Many teenagers are embarrassed by acne or pimples. It has been observed, however, that in most cases these difficulties disappear as adolescent boys and girls mature physically.

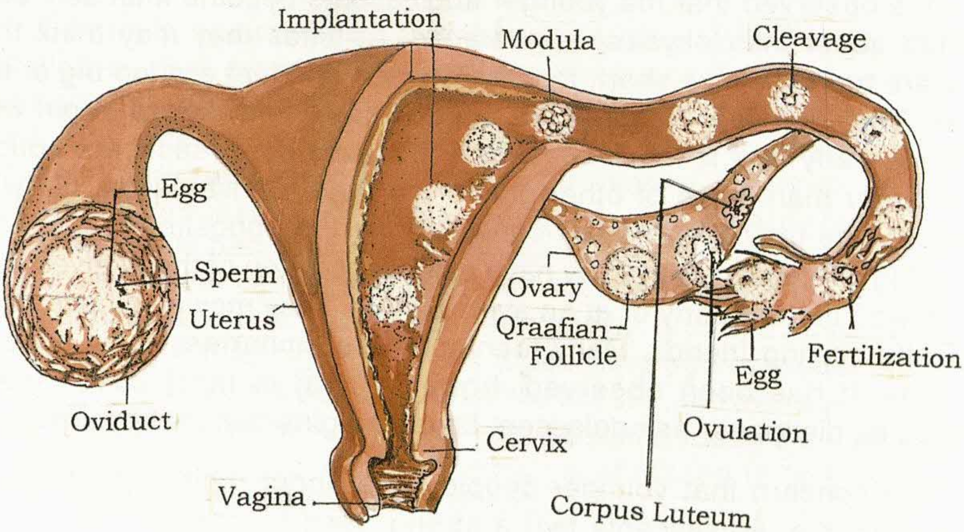
The concern that younger people have about their appearance is understanable. Adolescents feel a strong need to compare favourably with others their age. Anything that makes them different may upset them. Differences in physical growth and development are obvious during early teenage years, and hence those naturally become a focus of attention. During middle and late adolescence such differences fade in importance.

## Conception and Pregnancy

The physical growth and development thus is a maturing process which enables males and females to reproduce. Since the ability to reproduce is basic to the perpetuation and continuation of human life, the reproduction system assumes critical importance. We acquire some knowledge about the reproduction system through textbooks at the school stage, but very little information is available there in respect of conception and pregnancy.

## Conception

New life occurs when male and female sex cells unite at conception. These sex cells are given the chance to fuse and form a new life during sexual intercourse. As stated earlier, the ovary of the female releases one mature and ripe ovum which travels through the fallopian tube to the uterus. The semen of the male contains millions of sperms. When the semen is released during the sexual intercourse, the sperms swim from

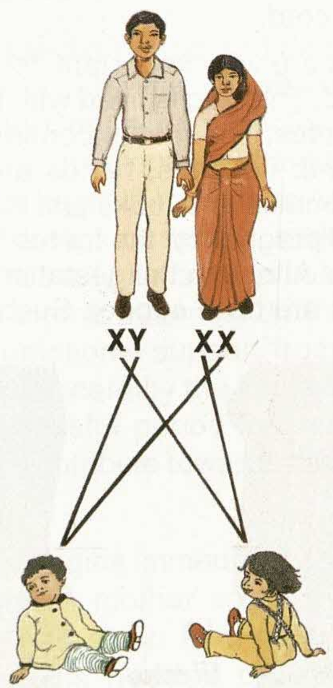



Conception

vagina through cervix and uterus to reach the ovum which is still in the fallopian tube. Whereas many viable sperms reach the fallopian tube, only one sperm fuses with the ovum and fertilization takes place. After fertilization, the fertilized ovum, known as ***zygote*** travels from the fallopian tube to the uterus. During those moments it undergoes cell division. Three to five days after fertilization the ***zygote*** reaches the uterus and the cell implants itself there. At the moment of conception the genes and chromosomes from mother and father unite to form a unique individual with particular traits and characteristics.

### (i) Determinant of the Sex of the Baby

It is important to know that all cells in human body contain 2×23 = 46 chromosomes. The sperm contains 23 chromosomes and so does the ovum. One of the 23 chromosomes is a sex chromosome which is named as X or Y chromosome. Whereas sperms have both X and Y chromosomes, ova have only X chromosomes. The sex of the baby is determined by the way the ovum is fertilized. If the ovum which has only X chromosome, is fertilized by the Y chromosome of the sperm, a male baby will be born. But if the ovum is fertlizied by the X chromosome of the sperm, a female baby will be born. The determination of the sex of the baby, therefore, is dependent on the male sperm and not on the female ovum or egg.




**Chromosomes (and not female) determine sex of the child**

### (ii) Twins

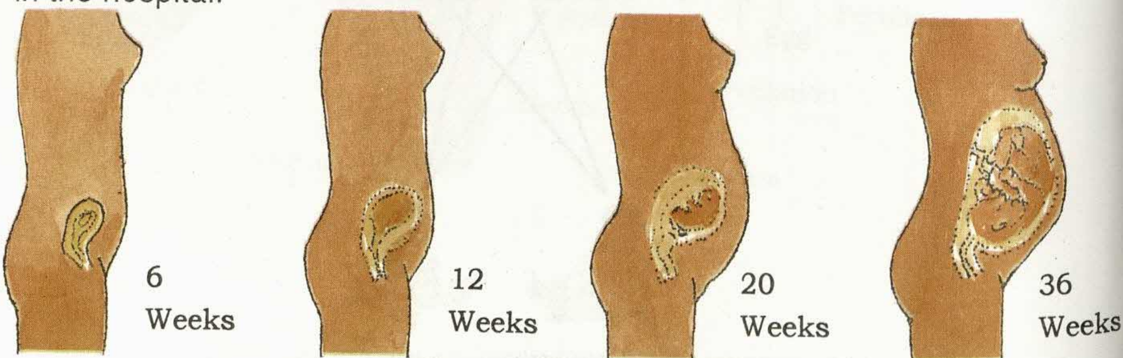
Occasionally, the ovary releases two ova at the same time. It is possible that both the ova are fertilized and ***fraternal twins*** are conceived. At times one fertilized ovum is divided into two completely separate cells and continue to develop into two babies. In such a case ***identical twins*** are born. There are instances, though rare, of the birth of ***siamese twins.*** These are identical twins, but some part of their bodies remains joined.

## Pregnancy

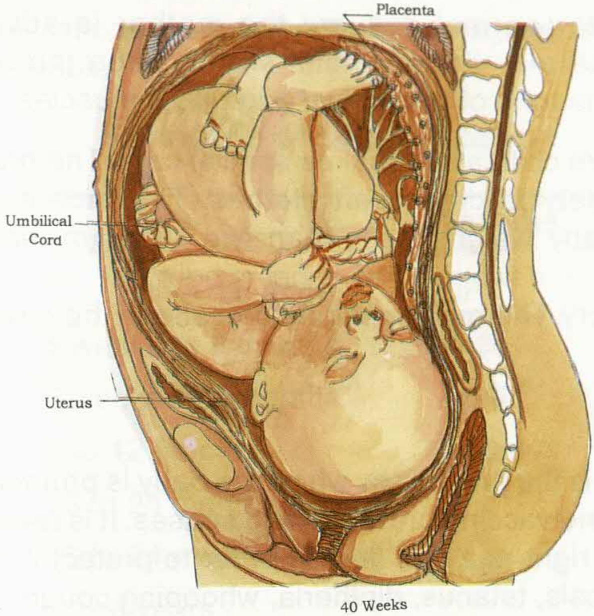
The fertilized ovum known as embryo, embeds itself in the lining of the uterus where it grows and develops. It is about this time the mother may miss the period and suspect that she is pregnant. In certain cases the pregnancy may not occur even though the mother has missed the period. It is, therefore, considered necessary for the mother who misses the period to see a doctor or nurse-midwife early to get the pregnancy confirmed.

The human foetus lives inside the uterus of the mother for nine months. This period is termed as gestation period. About one week after conception, the cells of embryo begin to specialize. Some cells form skin, others form nerve, bone, blood and glands. Some cells develop into placenta which is an organ that supplies the foetus with oxygen and nutrition. It also carries off the foetal waste products. The placenta is attached to the foetus by the umbilical cord.

The first two weeks are very important for the health of the foetus. It lives in the amniotic sac. This sac is filled with fluid which acts as a cushion and protects the foetus. The foetus continues to develop and by the end of the second month its limbs, hands and feet are fully formed. It moves and reacts to stimulus and looks just like a very little baby. During the last three months of pregnancy, the foetus has a well-developed brain and sensory awareness. Although the gestation period usually lasts about 280 days, some babies are born sooner. Such babies need special care in the hospital.




**Stages of Pregnancy**




**Fully Developed Foetus**

## Pre and Post-natal Care

Pregnancy is a very special period and demands great care for the health of the mother and the baby. It is important for the mother to visit a clinic or a Primary Health Centre or a doctor regularly. An adequate balanced diet is essential to get plenty of vitamins, minerals and protein. Exercise during pregnancy helps in more than the one way. Most women get some exercise while doing household work. A manual worker who does heavy work should actually lighten her load of work as pregnancy advances. Rest and relaxation is essential during pregnancy. Finally, the expectant mother needs emotional support from her husband and other members of the family. Loving care by the family helps the mother a great deal in overcoming the stressful period and each family member, the husband in particular, may contribute towards the well-being of the mother and the baby.

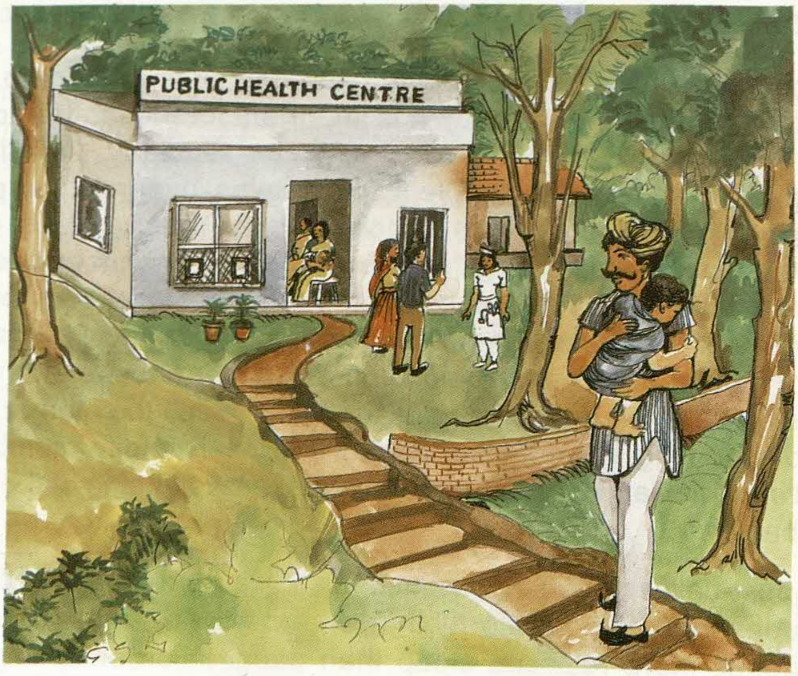
The post-delivery care begins immediately after the birth of the baby and includes care of both the mother and the child. After delivery the mother needs more rest and sleep than usual in order to regain her normal health. Extra care is needed on cleanliness and keeping infections away. If the mother has fever for more than two days after deliv-

medical help. After normal delivery the mother is advised to take balanced diet. She may do post-natal exercises on the advice of the doctor to regain the tone of abdominal and plevic muscles.

The newly-born child also requires special care. The baby should be wrapped completely in clean soft clothes. The face should not be covered. If the baby weighs less than two kilogram, special care is required. Within one or two minutes of being born, the baby must breathe and immediately cry. The mother should breastfeed the baby as early as possible.

## Immunization

Immunization is the process by which the baby is protected from various implications and vaccine preventable diseases. It is recommended to every child at the right age and time in order to protect it from six killer disease- tuberculosis, tetanus, diptheria, whooping cough, measles and poliomyelitis.




**Visit to PHC for Immunization**

The immunization schedule for children and pregnant women is given in the following table.

## Schedule of Immunization

| Beneficiaries | Age | Vaccine | No. of Doses |
|---|---|---|---|
| Infants | 6 weeks to 9 months | DPT | 3 } at monthly |
| | 6 weeks to 9 months | Polio | 3 } intervals |
| | 6 weeks to 9 months | BCG | 1* |
| | 9 to 12 months | Measles | 1 |
| Children | 16 to 24 months | DPT | 1** |
| | 16 to 24 months | Polio | 1** |
| | 5 to 6 years | DT | 1# |
| | 5 to 6 years | Typhoid | 2 |
| | 10 years | T.T | 1# |
| | 10 years | Typhoid | 1# |
| | 16 years | T.T | 1# |
| | 16 years | Typhoid | 1# |
| Pregnant Women | 16 to 36 weeks | T.T. | 1# |

*For institutional deliveries, BCG should be given at birth.*

*Booster dose.*

\# *2 doses, if not vaccinated previously.*

**Note** : *Interval between 2 doses of a vaccine should not be less than one month. Minor coughs, colds and mild fever are not contra-indications to vaccination.*

## Pregnancy during Adolescence

Adolescence is a period when the sexual maturity is attained in the early years with the onset of puberty, but the reproductive maturity is reached only when adolescents are physically fully developed. Therefore, if pregnancy and motherhood occur before the reproductive maturity is attained, it exposes adolescents to acute health risks and other problems. The incidence of early pregnancy is on the increase in both the

developing and the developed world. The growing rate of sexual activity among adolescents has been a matter of great concern.

In India also sexual activity commences at an early age for most of the women. Unlike in many other countries, the onset of sexual activity occurs here largely within the context of marriage because of the strong emphasis placed by the Indian society on female "purity". Early marriage continues to be the norm in several regions of India inspite of laws stipulating legal age at marriage as 18 for girls and 21 for boys. The early marraige and the pressure on young married women to prove their fertility result in high rates of adolescent pregnancy. The National Family Health Survey (1995) reported that as many as 36 per cent of married adolescents aged 13-16 and 64 pre cent of those aged 17-19 were already mothers or were pregnant.

Whether within marriage or outside it, adolescent pregnancy leads to serious consequences. As stated earlier, there are great health risks to the teenage mother and her child. Adolescent pregnant mothers are more likely to suffer from anemia. There is a greater likelihood of prolonged labour which multiplies the hazards to the mother and her child. Pregnancy at an early age, before the adolescent mother is physically fully developed, can result in severe damage of the reproductive tract. The available evidence suggests that maternal deaths are considerably higher among adolescents than among older women. The babies born to adolescent mothers generally have low birth-weight. Such babies are more likely to die at birth or in infancy.

Adolescents who begin childbearing in their early reproductive years increase the available period for childbearing. On an average they can have a higher number of births than those who begin childbearing late. It increases the risk of maternal and child morbidity and mortality.

Early pregnancy has serious psychological,social and economic consequences also. The adolescent mother is mentally not prepared to play the role of a mother. The psychological strain on the mother adversely affects her and also her baby. Early childbearing continues to be an impediment to improvements in the educational, economic and social status of women. It severely curtails educational and employment opportunities and is likely to have long-term adverse impact on the quality of life of the family.

# SOCIO-CULTURAL DEVELOPMENT

# SOCIO-CULTURAL DEVELOPMENT AND ADOLESCENCE

The period of adolescence is marked by rapid physical, emotional and psychological changes which influence the social environment and are also influenced by it. Adolescent boys and girls in nearly all societies are considered to have outgrown childhood, but they do not have defined roles of their own. Adolescents are caught in the ambiguous overlap between the reasonably well-defined roles of childhood and adulthood. Sometimes they are treated as children and sometimes they are expected to behave like adults. Quite generally children are not given gradually graded opportunities to take up certain responsibilities compatible with their physical and intellectual development. And hence, during adolescence while they experience sudden widening of their world, the social environment does not keep pace with such changes in them. They start encountering new ideas, new concepts and new values. Most adolescents welcome the opportunity to take on more responsibilities and become more independent.

All these developments among adolescents may be attributed primarily to hormonal changes which prompt emotional changes among them. As adolescents mature physically, they normally develop a strong sense of personal identity and greater self-confidence. The emotional changes, in particular, influence their sense of self-indentity, body image and self-esteem and self-concept. They also experience sudden changes in their social relationships—the relationship with their parents, peer groups and, more importantly, the opposite sex.

## Emotional Development

Adolescence is often described as a period of great excitement and emotional turbulence. The changes that take place in adolescents result in sudden upsurge of sex feelings in them. Growing adolescents may experiences sexual excitement from simply watching and being near to some one they are attracted to. At times they may not even understand that emotions they are feeling are sexual in nature. Increased production

of hormones prompts sexual thoughts in them, but because of social control their interests are not expressed in reality, which leads them to day-dreaming. Many a time such thoughts result in the release of semen among boys. It is known as nocturnal emission or 'wet dream'. While it is common at this stage of development, it is also quite normal that some adolescent boys may not experience it at all.

Puberty is described as a time of frequent shifts of moods for most adolescents. Discomfort and concern about changes in their bodies and feelings may cause emotional stress. Their moods may shift quickly and unpredictably. Some of them become irritable, restless, angry and tense due to hormonal imablance. The whole process is presumed to be emotionally stressful and give rise to a variety of behaviours.

However, normally the period of adolescence with prominent physical and emotional changes does not appear to be so stressful as is ordinarily assumed. Most adolescents manage changes and developments without making those appear like problems. If they are given authentic knowledge about these changes and developments, and if parents, teachers and other adults share the concerns of adolescents and extend their support to them, it will be easier for them to cope with these changes. There is a need to provide adolescents opportunities to express their emotions by creating for them a healthy emotional climate in home, school and the community.

## Identity Development

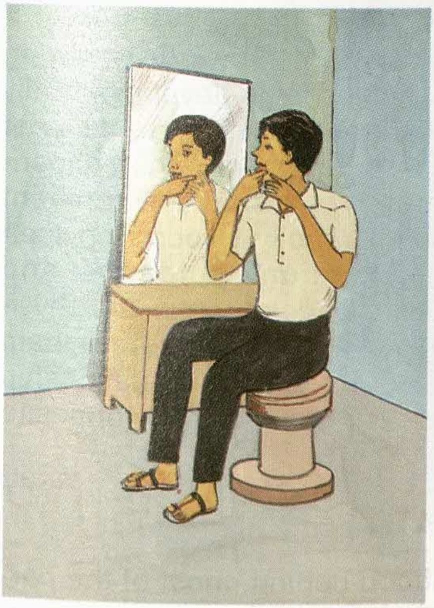
During the process of growing up at this stage adolescents try to define themselves and establish their personal identity. Personal identity is the awareness one has of oneself as a consistently whole person. The establishment of identity is a gradual process. Every child establishes an identity of his or her own. But the physical, emotional and psychological changes taking place in them when they enter into the phase of adolescence, interfere with their sense of personal identity. As adolescents mature physically, they normally develop a stronger sense of personal identity developed during early childhood. They tend to assert and take their own decisions about their needs, interests, abilities and vocations. During this phase of experimentation, adolescents are expected to develop a gender role identity, a positive body image and a sense of self-esteem and self-confidence.

The process of identity formation is not uniform among adolescents. Some of them do not explore different alternatives to safisfy their needs,

commitments or aspirations for vocations. They opt for more convenient set of beliefs and life goals. Others take their own time in self-definition and self-acceptance, try to critically examine the prevailing values and beliefs of adult world and explore various alternatives. They gradually resolve the uncertainties and emerge with their own sense of self by adopting roles which are acceptable to the society.

## Body Image

Body image is an individual concept of how one's body appears to others. It also refers to the way a person feels about his or her physical appearance. Although the size, shape, colour of skin, height and some other characteristics of the body are mainly determined by heredity conditions and natural environment, the formation of the body image is influenced by the socio-cultural factors. The media and the role models promoted by electronic media in particular have a predominant impact on the concept of body image of adolescents. Many of them feel concerned, if the shape and size of some part of their body is not in consonance with their image of an ideal man or woman. They need to be made aware that the attractive personality does not depend simply on physical appearance. Each one has to appreciate his or her body as it is. They also need to realize that many children pass through a temporary phase of moderate obesity during early adolescence.




**Care for Physical Appearance**

## Self-esteem and Self-concept

It is essential that adolescents develop and maintain a high sense of self-esteem and self-concept. A rational understanding of self in relation to others and the development of a positive and accurate sense of self are significant facets of the process of growing up.

Self-esteem is closely identified with self-respect. It includes a proper regard for oneself as a human being and an accurate sense of one's personal place within the society. Self-esteem is the foundation upon which social development of individuals is based. However, if extended to the extreme, self-esteem can degenerate into conceit, an exaggerated estimate of one's own ability, importance and wit. On the other hand, the lack of self-esteem may result in a sense of unworthiness.

Sefl-concept can be defined as a person's perception of himself or herself. It includes perception of his or her own ability, character, attitudes, traits, aims and actions. It is a directing force in human behaviour because a person acts in accordance with his or her self-concept. A person who is confident and has high regard for himself or herself behaves differently from another person who considers himself or herself incompetent, inferior and insecure. A person who perceives himself as poor reader makes so many mistakes when asked to read, and hence his or her self-image as a poor reader is reinforced.

## Social Relationships

The most critical dimension of the process of growing up during adolescence relates to social relationships. Adolescents develop socially mainly by expanding and redefining their relationships with parents, peer group and members of the opposite sex. Although every child experiences social relationships, during childhood its social environment usually centres on the home. Children almost wholly depend on their parents and grow under their care, protection, guidance and control.However, when they enter into the phase of adolescence, the physical, emotional and psychological developments, which take place in them trigger a marked change in the patterns of inter-personal relationship between adolescents and their parents, the peer group and the opposite sex.

## Changing Relations with Parents

Although adolescents leave their childhood behind, most of the parents want and continue to treat them as children to be cared, watched,

protected, guided and controlled. Adolescents, on the other hand, start defining their personal identity and assert their independence. They begin to [illegible] from close parental care. While at home, they often prefer being alone. Those preferences are normal but they may not seem so to parents. Adolescents may often have increasing conflicts with their parents over the amount of freedom they think they deserve. Parents treat these changes among growing children as a threat to their authority and opposed to parental code of conduct. Instead of accepting the youngster for what he/she is, they try to impose on him/her their views about what he/she should be and do. Parents become anxious because they think that adolescents are inexperienced and hence they cannot take appropriate decisions. It is, therefore, not unlikely that stress and strain on adolescents are the product of the anxiety generated in parents. Under these circumstances it is expected that adolescence would be



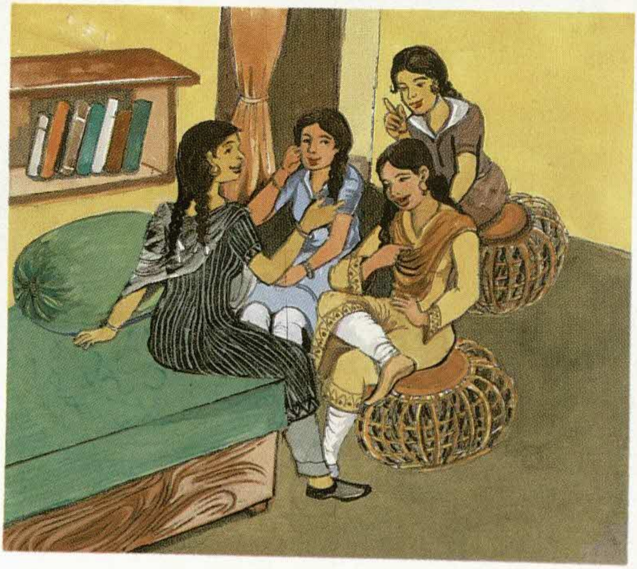
**Adolescents and Parents : Mutual Understanding**

they think that adolescents are inexperienced and hence they cannot take appropriate decisions. It is, therefore, not unlikely that stress and strain on adolescents are the product of the anxiety generated in parents. Under these circumstances it is expected that adolescence would be characterized by increasing conflict between adolescents and parents. This is probably true in individual homes or in cultures where there is a tradition of marked parental domination.

Social development is easier for those adolescents who feel that their parents love and trust them. Adolescents need to be given increasing opportunities for freedom and self-direction. Restrictions on them are required to be imposed only when needed and, that too, with due consideration of their commitments and desires. Parents may display trust by granting their children the freedom they require. An over-protected adolescent is likely to have greater difficulty in learning to act independently. Specialists suggest that the separation from parents have positive psychological effects on both the adolescents and their parents. A greater degree of separation shows more independence from, and affection towards, their parents. There is no strong evidence that adolescence is commonly a period of rebellion against parents.

## Peer Group Relationships

Peer group relationships help adolescents learn to deal with people



**Interaction in the Peer Group**

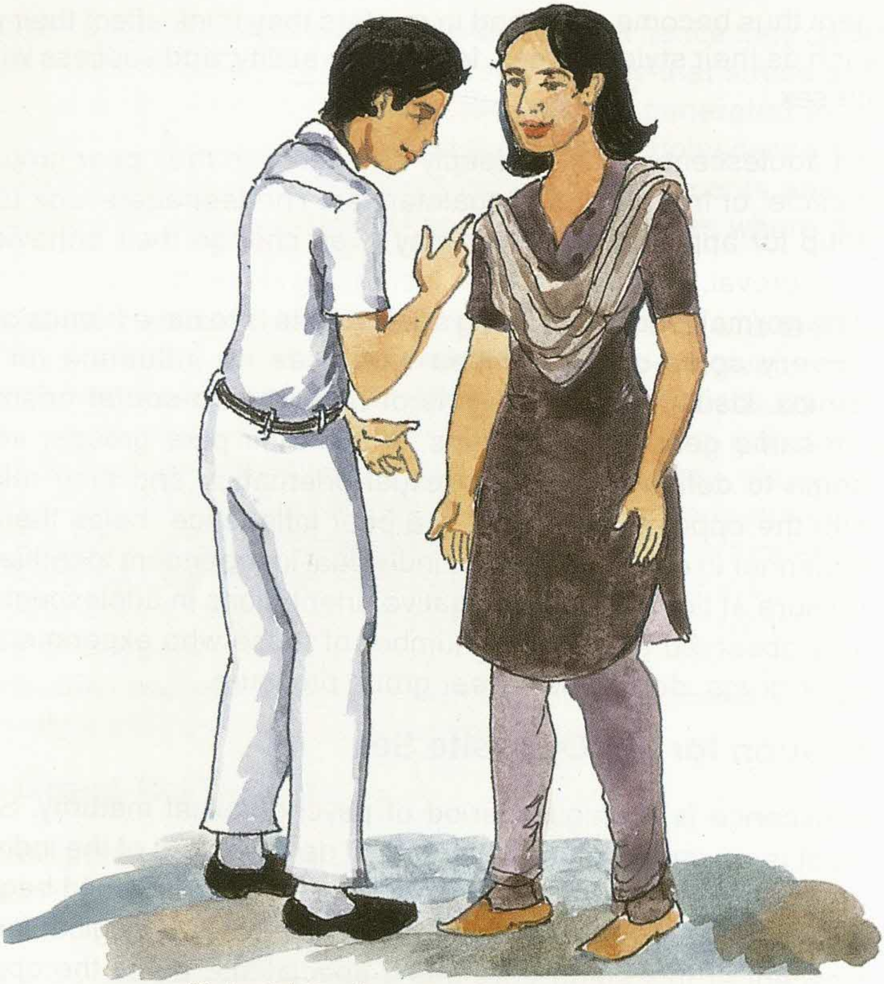
Teenagers thus become absorbed in matters they think affect their popularity such as their style of dress, leadership ability, and success with the opposite sex.

Most adolescents become deeply involved with their peer group,that is their circle of friends and acquaintances. The teenagers look to their peer group for approval, and they may even change their behaviour to win that approval. It promotes their increasing dependence on the peer group. The normal tendency among adolescents is to have friends of both sexes. Every socio-cultural milieu exercises its influence on such relationships. Usually boys and girls develop ***homo-social*** orientation and form same gender peer groups. Within their peer groups, adolescents begin to define their heterosexual orientation and their relationships with the opposite sex. While the peer infleuence helps them in a positive manner in establishing their individual independent identities, the peer pressure at times initiates negative orientations in adolescents. It is commonly observed that a large number of those who experiment with smoking or drugs, do so under peer group pressure.

## Appreciation for the Opposite Sex

Adolescence is a unique period of psycho-sexual maturity. Sexual adjustment is an important part of the total development of the individual into maturity. It is during adolescence that every growing child begins to experience a distinct sexual urge or drive which is a biological instinct. An adolescent at this stage develops a special interest in the opposite sex and longs for personal relationship with the individual of the opposite sex. The mutual attraction between boys and girls is, therefore, a completely normal and universal human behaviour.

However, adolescents confront problems in managing their sex drive and the consequent attraction for the opposite sex, primarily because they are not helped in appreicating the real nature of these developments, the sublimity of relationship with the opposite sex and significance of social control and standards and moral codes. As a result social environment experiences deviant behaviour of adolescents when they seek sexual gratification at a purely physical level, when the inhuman acts of rape and sexual violence are reported and when young females become victims of eve-teasing.



**Mutual Attration : Feelings and Choice**

Sex drive is the basic instinct upon which depends the preservation and perpetuation of human race. It is not a means to gain the sensual pleasure but a positive force in the development of the personality of individuals. It is the anchor to the partnership between man and woman who share interests and ideas, mutual acceptance of responsibilities, self-realizaton and love. That is why the society maintains close watch on the interactions between man and woman. Both are expected to conform to the societal codes or rules for the common good of society, for a happy family life and for individual's own development.

In the above background, an understanding of the fundamental bases of male-female relationships by adolescents, is likely to develop in them an appreication for the opposite sex. Whereas the sexual impulse

generates a desire in adolescents to have close interaction with the opposite sex, sexual expression at purely physical level cannot form the whole basis of such relationships. By considering each other as "sex symbol", adolescents cannot establish a lasting relationship between themselves. They have to appreciate that every individual has equal self-worth and human dignity. Every adolescent is a dignified individual first and only then anything else. Respecting human dignity of each individual makes it mandatory to have firm belief in the inviolability of his or her body, feelings and choice. Human body of both man and woman, with all its inner attributes, physcial and psychological, is sacred.

Another very significant basis of deep interpersonal relationship between male and female adolescents is love. Most adolescent boys and girls think that they are in love when they feel attracted towards each other. But they invariably fail to distinguish between infatuation and love and hurriedly try to seek sexual gratification at purely physical level. It has been generally observed that men more often than women may promise love to have sensual physical relationship, but they may fail to keep promises or to assume obligations that are taken for granted when people really love each other. By observing the pattern of behaviour, one may clearly notice that while an adolescent boy and a girl may feel intensely attracted towards each other, the relationship is far too immature to be considered love. When individuals love each other, the physical gratification or sensual pleasure occupies a back seat.

In order to build a positive relationship with the opposite sex, therefore, it is essential to understand that both the sexes need to treat and respect each other equally. Boys in particular must respect the rights and feelings of girls. This may be possible when adolescents learn to give expression to their sexual desire according to social standard and observe societal code while interacting with each other. Sex drive has to be controlled, if it is to become a positive factor in defining interpersonal relationship with the opposite sex. Self-control does not mean denial or abstinence, it means self-discipline. Adolescents need not be slaves to their hormones, nor should they be slaves to the peer group pressure or media models.



Friendship demands respect for human dignity

# GENDER ROLES

# GENDER ROLES

Gender, which has been used in modern English as a grammatical term to classify nouns into types more or less similar to male and female, has acquired the status of a concept in recent years to describe the socio-cultural differences established in social life between men and women. It is now being increasingly accepted that gender issues influence all aspects of human life—the way individuals grow in the family, the schooling they receive, the health care services they use, the social roles they play and the power and authority they command in different contexts. It is defined in more than one way as a category, as a process, as an institution, as a role, as attributes of individuals and even as the way societies are organized.

## What is Gender ?

The term 'gender', derived from the French word *genre*, is used in place of 'sex', because most differences between men and women are culturally ascribed rather than biologically determined. 'Sex' refers to binary division between males and females—the differences between them in terms of physical features, chromosomes, hormones and secondary sexual characterisitcs. But it has been realised, particularly by the social scientists, that biological differences between sexes cannot provide a universal basis for social definitions. The relations between men and women and the symbolic meaning associated with their respective categories, males and females, are socially constructed and can not be assumed to be natural, fixed or predetermined. Which is why, the use of the term, gender is preferred.

'Gender' refers to those characteristics of males and females, that are shaped by social forces. It is socially and culturally constructed, giving social meaning to biological differences. For example, when we discuss sex differences in life expectancies, we refer to biological differences in survival rates and compare between male an female survival rates. But when we talk of gender differences in life expectancies, we

refer to social influences on survival, such as widely observed preference for sons and the discrimination of girls and women in food allocation, nutrition, health care and education.

The differences between males and females derive partly from biology, partly from roles that men and women traditionally play in society, and partly from their beliefs and opinions. It is useful to denote biological factors by one term, 'sex', and socio-cultural ones by another, 'gender'. But actually the two are generally very difficult to distinghish in real life. In many ways the notion of sex, like the concept of gender, is also socially constructed. Physical and physiological processes have no meaning outside of socially constructed understandings of them. Human reproduction is as much a biological process as a social activity.

However, one area in which the distinction between sex and gender has been quite explicit is the prevailing inequalities between men and women, the subordination of women to men. It is an appropriate concept to understand the gender-based roles assigned by the society to males and females and the role stereotypes which influence all aspects of human life.

## What is Gender Role ?

Gender roles are sets of behaviour which are determined by the society for males and females. Every culture determines its own appropriate gender roles; and hence these roles vary from society to society and from time to time. What is accepted as masculine and feminine roles in one society at a particular point of time may not necessarily be accepted in another, and even in the same society at a different point of time.

In almost all societies, men and women are assigned different roles. They do not perform equal roles or hold equal positions of power in any society. Males are valued higher than females. While males are regarded as stronger sex, females are termed as fair sex and considered weaker. It is believed that the body of the male is tough, invulnerable and impenetrable, while a female body is soft and delicate. Men are characterized as principal wage earners, heads of the household and holders of leadership roles in the community. The main role socially assigned to women since ages is that of raising a family and maintaining the home, being ideal mothers, wives and sisters by sacrificing their interests for their sons, husbands, brothers and other male members of the family.

## Stereotyped Gender Role Development

There has been a perceptible change in the traditional gender roles during the last three to four decades consequent upon the efforts to promote gender equality which embodies the principles of equality of rights, status and mutual respect between males and females. But stereotyped gender roles continue to have substantial impact on the lives of all people in all societies. These role stereotypes are perceived to be natural, but these are actually created by society and transmitted from generation to generation, resulting in the perpetuation of the discrimination against women.

The biological process does not discriminate on the basis of the sex of foetus. The sex of the foetus is determined at the time of conception. As explained earlier, if the ovum is fertilized by the Y chromosome of the sperm, the child will be male, and if the ovum is fertilized by the X chromosome of the sperm, the child will be female. The rest of the process of development of the foetus in the uterus of the mother remains the same.

But the moment the child is born, the first social activity that takes place is the identification of the gender of the child, based on which the process of gender role assignment begins. Usually the gender identity as male and female develops among individuals in consonance with the gender role assignment and the way the child is brought up.

The process of construction, articulation and transmission of prescribed gender roles starts right from the birth of the child and continues to be an intergral part of the socialization of children into adulthood. The child starts understanding gender roles at the age of two and a half or three when members of the family and community reinforce his or her identity as a boy or a girl. Throughout their childhood boys and girls receive different messages about their behaviours that are expected of them. These messages are communicated to them by parents, society, peers and the mass media. The messages communicate that certain behaviours are acceptable for boys but not for girls, and *vice versa.* As the child grows up, he or she identifies himself or herself with the parents of the same sex. The male child starts internalizing the characteristics of his father and the female child those of her mother.

The gender role identity is reinforced through the social learning process. Boys are told not to behave like girls and *vice versa*. Boys are

discouraged from showing emotions and girls from being aggressive. A male child is repeatedly reminded that he is a 'boy' and the female child a 'girl'. This happens with the female child also. Boys learn to be boys and girls to be girls by performing stereotyped gender roles. Their gender role appropriate behaviour is encouraged and rewarded, whereas the inappropriate behaviour is invariably discouraged, ignored, discarded and even punished.

Even the schools have been promoting these stereotypes, although conscious efforts are being made to remove the gender bias in the school curriculum. The school education system being an integral part of the larger social environment is yet to insulate itself from the impact of gender stereotypes being nurtured for long by the socio-cultural milieu. The gender roles assigned to females and males continue to influence the entire process of curriculum transaction in schools.

## Gender role Stereotypes and Adolescence

The gender role stereotypes register the most striking impact when children grow and reach the stage of adolescence. The gender identity in respect of all kinds of roles, such as occupational roles, domestic roles, kinship roles, community leadership roels, conjugal roles and parental roles, developed in them during the formative period continue to influence their behaviour. The cumulative effect of such gender-defined roles results in the inculcation of attitudes and behaviour and value orientation viewed as appropriate for males and females in the specific cultural setting.

However, the adolescence being predominantly a stage of sexual development, the sexual and reproductive health occupies the centre-stage in the process of gender role development among adolescents. They stereotype themselves to the prescribed gender roles which shape their understanding of "man-woman relationship" and influence their attitude and behaviour towards the opposite sex and the entire sexual and reproductive health issues. Once such stereotyped gender role attitude is formed it is most resistant to change. Which is why, an urgent need is felt to provide adolescents with a non-stereotyped environment before they mature and adopt rigid stereotyped gender roles. Appropriate gender role development among adolescents is regarded essential to ensure their healthy physical, emotional and social growth and development. They need to appreciate that equal relationship between males

and females in all matters including sexual relations and reproduction is the *sine qua non* of a civilized society. This requires the owning of full responsibility for the integrity of the person, sexual behaviour and its consequences by both the partners and more importantly by the male.

## Proper Gender Role Development

The basic understanding of "man-woman relationship" transmitted from one generation to another has been influencing the prescribed gender role development. Since procreation for self-perpetuation of human race is a basic instinct of human beings, sexual relation has occupied the most important place in man-woman relationship. But this relation has been asymmetrical. Masculinity is often defined as being tough whereas femininity is regarded as being soft and delicate. The females have to depend on males for their physical and emotional security. They are largely treated as an object of satisfaction, and the man-woman relationship arouses so much speculaltion.



**Gender does not affect ability**

It is primarily because of this asymmetrical man-woman relationship that females are subjected to eve-teasing, domestic violence, sexual abuse and rape. Women are valued primarily for their reproductive role. Marriage and child bearing have always been central areas of women's lives. But they have not enjoyed the right of self-determination even in these areas. While males almost monopolize the decision-making in reproductive matters and nurturing of children, they hardly share any responsibility. The preference for sons has led to the perpetuation of different forms of discrimination against girls including harmful and unethichal practices of pre-natal sex selection, female foeticide and female infanticide. When girl children grow, the gender based discrimination undermines their self-esteem. They are made to enter into early marriage and brave the hazards of early motherhood.

No doubt increasing number of adolescents are coming of age and despite stereotypes, prescribed gender roles are being defined and redefined. But there is a need to promote appropriate gender role development particularly among young children during their formative age. The transformation of traditional models of gender relations is essential in order to create a decent society where men and women can live meaningful, creatively and with dignity. The gender roles need to be redefined to meet the following requirements :

- It is essential to realize that women have a particular identity as women but they also have universal identity as human beings. Like men they have equal self-worth, social-worth and dignity. All human beings are born free and equal in dignity and rights. A civilized society cannot afford to treat women as objects of satisfaction. The man-woman relationship must be based on respectful and harmonious partnerships.

- The full respect for the integrity of the person requires mutual respect, mutual consent and willingness to accept responsibility for the consequences of sexual behaviour.

- The mutual respect and relations of equity between the genders promote responsible sexual behaviour and contribute to the improvement of quality of life of individuals.

- The social environment has to take up reproductive health as a human rights issue to include females right to have control over their

bodies, to decide freely and responsibly on matters related to sexual and reproductive health without coercion, discrimination and violence. It is essential to create an environment where the females can assert their wishes and take their own decisions.

- Sexual and reproductive health and gender relations are closely interrelated. These together affect the ability of men and women to achieve and miantain sexual health and manage their reproductive lives.

- There is an urgent need to eliminate all forms of discrimination against the girl child and the root cause of son preference, which results in harmful and unethical practices. It is equally essential to appreciate the value of the girl child and to strengthen her self-image, self-esteem and status.



**Gender does not affect performance**

- The full participation and partnership of both men and women are required in reproductive life, including shared responsibilities for care and nurturing of children and maintenance of the household. Underlying the plea for shared responsibilities is the hidden agenda of addressing the larger question of unequal power relations between females and males and socially prescribed gender roles.
- It is crucial to appreciate that "women's empowerment" and "male involvement" in reproductive health are two sides of the same coin.

# HIV/AIDS : BASIC INFORMATION

# HIV/AIDS : BASIC INFORMATION

AIDS (Acquired Immune Deficiency Syndrome) is a relatively new phenomenon. It first appeared at the beginning of the eightees. There is a lot about it that we do not know. But we do have a basic picture of HIV, the virus* which causes AIDS, how it is spread and how it affects the human body. It is essential to have a firm grasp of the basic facts to understand this phenomenon. Also, we have to be prepared to challenge prejudices and offer reassurances against unwarranted fears and anxieties.

AIDS cannot be compared with diseases such as cholera and malaria, which currently claim the lives of more people. The reprecussions of AIDS are much more critical. Most infectious diseases strike down the very young and the very old. AIDS strikes a deadly blow at men and women during their youth, in their most productive yeas when they are responsbile for the care and support of both children and elderly parents. It is estimated that about 50 per cent of HIV infections is among the young people aged 15-24. The most critical feature of AIDS is that the transmission of its virus, HIV generally goes unrecognised.

This section aims at providing basic knowledge and developing an understanding in respect of HIV/AIDS. It explains the meaning of terms like AIDS and HIV, delineates the effects of HIV infection on human body and describes the interaction between HIV and the immune system. It also discusses the routes of HIV transmission. This section makes an attempt to explain how HIV is not transmitted. It mentions briefly about the interrelationship between HIV infection and STDs.

---

* Virus : Disease producing smallest living objects (micro-organisms) found as parasites in plants and animals including humans. They cannot live or multiply outside a host cell. Each virus requires a specific cell. They are so small that they cannot be seen under a light micro scope. Even filters which retain bacteria, cannot prevent the virus from passing through them.

## What is AIDS

AIDS stands for :

| | | |
|---|---|---|
| Acquired | : | not genetically inherited but one gets it from some-body. |
| Immune Deficiency | : | weakness or inadequacy of the body's main defence mechanism, the immune system. |
| Syndrome | : | not just one disease or symptom but being present in the body as a group of dieseases or symptoms. |

AIDS is a condition caused by a virus. A closer look at the term itself tells us a lot about what AIDS is. AIDS arises from damage to the immune system* acquired as a result of infection with HIV (Human Immunodeficiency Virus). There are many conditions which can result in someone being diagnosed as having AIDS but what links them all is a deficiency or weakness of the immune system. The word syndrome is used to emphasize that the AIDS presents itself as a group of signs and symptoms and not as a single disease.

AIDS cannot be diagnosed on the existence of one sign or symptom. All the symptoms of AIDS can be symptoms of other diseases too. Therefore, a person cannot tell whether he/she has AIDS or not unless he/she has been examined at a hospital or health centre and diagnosed as such.

## What is HIV

HIV stands for :

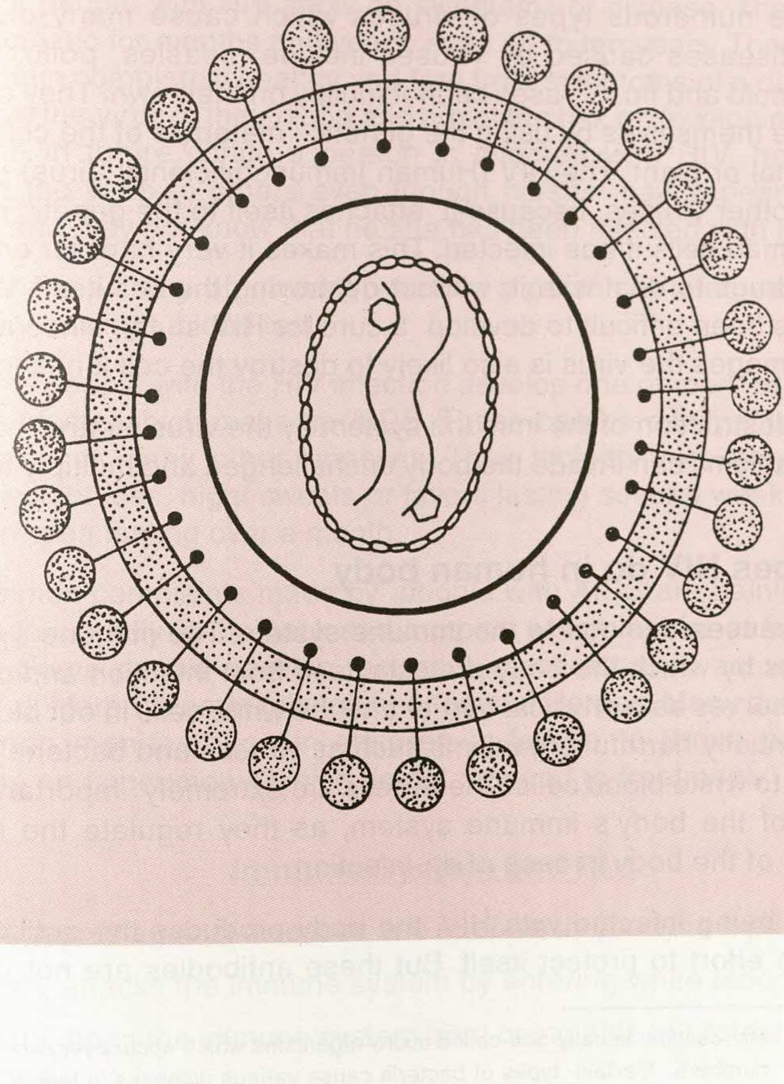
H : Human

I : Immunodeficiency

V : Virus

---

* Immune System: The combination of body mechanisms that provides organisms with the ability to protect themselves from infection by germs. This is an essential requirement for survival. The immunity of animals including humans is due to imprevious skin, secretion of mucus and acids, activity of germ engulfing cell in the blood and most importantly chemical defence by special antibodies and antitoxins.



**The Human Immunodeficiency Virus (HIV)**

HIV is a virus which causes impairment to the immune system in humans. There are currently more than one type of HIV, which are known to cause AIDS. HIV belongs to a family of many viruses called retroviruses. It is tiny, a thousand times smaller than the thinckness of a hair, and it looks like a rolled up porcupine or a sunflower in full bloom. It also looks like a wheel having radiating spokes with clubbed terminals. Viruses are tiny organisms that cause many diseases in humans and other animals and even in plants. Viruses are the smallest and simplest living things. There are numerous types of viruses which cause many diseases. Human diseases caused by viruses include measles, polio, mumps common cold and flu. Viruses cannot mulipy on their own. They can only reproduce themselves by using the genetic materials of the cells of the host animal or plant. The HIV (Human Immunodificiency Virus) is different from other viruses, because it attaches itself to the genetic material of the human cells it has infected. This makes it very hard for either the body or drugs to deal with it, without destroying the cell itself. Which is why it has been difficult to develop a cure for HIV so far, since anything which damages the virus is also likely to destroy the cell it has infected.

The destruction of the immune system by the virus means that infectious organisms can invade the body unchallenged and multiply to cause disease.

## What does HIV do in human body

HIV causes.damage to the immune system. The immune system is the means by which the body protects itself from infection and disease. The skin serves as a physical barrier and the white cells in our blood deal with potentially harmful organisms such as viruses and bacteria*. HIV is attracted to white blood cells. These cells are extremely important for the working of the body's immune system, as they regulate the immune response of the body in case of an infection.

After being infected with HIV, the body produces the antibodies to HIV in an effort to protect itself. But these antibodies are not powerful

*Bacteria : Microscopic usually one-celled micro-organisms which occur everywhere in large numbers. Certain types of bacteria cause various diseases in human and other animals, most of which can now be treated with the use of antibiotics. In nature, they also act as decomposers of dead organic material. There are various kinds of bacteria which are helpful to humans. e.g. Lactobacillus (curd)

enough to neutralize the virus. HIV immediately attaches itself to and integrates itself into the genetic material of some white blood cells. It is then ready to reproduce itself any time in the future. It can remain in the cells for a long period before destroying them. Once an HIV has invaded a cell it plugs its own genetic infromation into the cell. It thus transforms the cell into a collaborator which then produces new viruses. The body eventually becomes susceptible to all kinds of infections.

Most people with HIV show no symptoms of disease. They may be asymptomatic for months and years, even up to ten years. These people may remain completely healthy and free from symptoms of a disease but they have the virus in their blood and are at the risk of developing AIDS at any time in future. Once a person is infected with HIV, he/she can transmit the virus to others even though he/she may appear perfectly healthy and may not know that he/she has been infected with HIV.

There is no way of knowing whether a person is infected with HIV except by having a blood test.

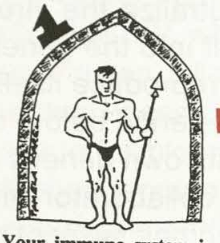
Some people with the HIV infection develop one or more of the signs and symptoms which make up AIDS. These can be easily mistaken for symptoms of many other illnesses. They include persistent fatigue, severe weight loss, night sweats or fevers lasting several weeks, persistent diarrhoea lasting over a month.

Common complaints made by people with AIDS are painless swollen glands, usually in the neck and armpits, which last for at least three months. Some people develop recurrent infections such as oral thrush (Candida), Herpes zoster (shingles) or genital Herpes. Many develop TB. A common manifestation in children is failure to thrive prolonged diarrhoea and pneumonia which do not respond to treatment.

**Immune System and HIV**

- It guards against diseases and enables the body to fight germs.
- HIV attacks the immune system by entering white blood cells.
- HIV stops the immune system from being able to protect human body.
- Once the immune system becomes weak, the possibility of the body being affected by germs increases manyfold.

# How HIV Weakens Your Immune System



Your immune system is your guard against disease.



White blood cells kill the germs that attack your body.



HIV attacks your immune system by entering your white blood cells.



HIV stops your immune system from being able to protect your body.



Once HIV has weakened your immune system, germs can take over your body, and you become sick.

## HIV Can Enter Your Body Through:

★ Sexual intercourse without a condom with an infected partner

★ Use of unsterilized needles or syringes infected with HIV

★ An infected mother may pass it on to her child before, during or after birth

★ Transfusion of blood infected with HIV

These symptoms are also common in people who do not have HIV infection. However, when several of these occur at the same time and they are persistent, this may indicate the development of AIDS. As the immune system is increasingly damaged, these health problems become more serious and more difficult to treat, as the body no longer responds to treatment.

It is not yet understood why the length of time it takes for people with HIV to develop AIDS varies so widely from person to person. The following factors are thought to be reasons for the variation :

- The amount of concentration of the virus in the blood and infection with different strains of virus.
- Individual differences in immune responses.
- Stress on the immune system through general lack of fitness and exposure to repeated or severe infections.
- State of mind — anxiety, depression and generally feeling low, increasing the risk of other infections and adding stress to the immune system.
- Other health risks such as smoking, overtiredness, low nutrition, poor diet and heavy drinking of alcohol.

## How is HIV transmitted

HIV can be transmitted through semen, vaginal and cervical fluids, and blood.

## Sexual intercourse

The most common route of transmission is unprotected sexual intercourse with an infected partner. It accounts for nearly 80 per cent of the world's HIV infections. HIV is present in semen and in cervical and vaginal fluids and the vagina and penis provide entry points to the body. The rapid spread of HIV/AIDS in the world is attributed to transmission through sex. HIV has been described as the 'latest' Sexually Transmitted Disease. Transmission is made easier by the presence of other STDs, particularly genital ulcer disease such as chancroid and syphilis. In the presence of an STD, particularly where a sore is present, the risk of contracting HIV during unprotected sex with an infected person is very

high. This is because semen or vaginal secretions of an HIV infected person can come in contact with open sores easily.

## Infected mother to new-born child

HIV can be transmitted by a woman with HIV to her child before or during birth and after birth. Before birth, it may be transmitted across the placenta to the foetus and during birth it may be transmitted through the mother's blood. The chance of an infected mother passing on HIV to her child is estimated at about 30 per cent. In other words one out of three children born to an infected mother is likely to be born already infected with HIV. Most of the children with HIV do not survive for longer than 2-3 years.

## Blood

Human blood provides a good medium for the growth of micro-organisms including HIV because of its nutrient value, adequate oxygen content and adequate temperature. Therefore, infusion of blood and blood products which are infected with HIV, is one of the most efficient means of transmission of HIV infection. As such testing of blood for HIV before transfusion is mandatory. This means that before transfusion each and every unit of blood must be tested for HIV.



**Drug Abuse through sharing needle leads to HIV infection**

As a virus which lives in the blood, HIV may be transmitted by the transfusion of blood from an infected donor. That is why it has been made mandatory for every blood collection centre to conduct HIV test before collecting blood from a donor.

HIV can also be transmitted through the use, without proper sterilization of needles, syringes, blades, knives, surgical instruments and other piercing instruments that have been used on an infected person. This can also happen by instruments used for circumcision, tattooing acupuncture, earpiercing and traditional healing practices. Used needles and syringes can be soiled with minute amount of leftover blood. If these needles and syringes are used, the infected blood could directly transfer HIV into the blood stream. It should be noted that the possibility of transmission of HIV through normal injections in clinics and hospitals is extremely low, because it is essential for clinics and hospitals to use sterilized syringes and needles.

Drug addicts who inject drugs into their body are very prone to get HIV infection. Sharing of syringes among injecting drug users is common. Such a behaviour is highly risky from the point of view of getting HIV infection as injecting drug users often end up giving themselves mini transfusions.

## HIV Transmission

The following table shows the efficiency rate and the percentage of total number of HIV infected persons for different routes of HIV transmission :

| Type of Exposure | Efficiency of per single exposure | Percentage of total number of HIV infected persons |
|---|---|---|
| Blood Transfusion | 90% | 3% - 5% |
| Perinatal (mother to child) | 15% - 45% | 0.1% |
| Injecting Drug Use (sharing needles) | 0.5% - 1.0% | 5% - 10% |
| Sexual Intercourse | 0.1% - 1.0% | 80% - 90% |

As is evident from the table, blood transfusion has the highest efficiency, but the percentage of persons who get the HIV infection through this route, is very low i.e. 3% - 5%. As against this, sexual intercourse has an extremely low efficiency rate i.e. 0.1% - 1.0%, but the percentage of persons who get HIV infection through this route is very high, i.e. 80% - 90%. The percentage of infection from mother to child is also relatively very low. The primary mode of HIV transmission, therefore, is and will be heterosexual intercourse.

## How is HIV not Transmitted

It is very important to know and remember that HIV is not transmitted by the following :

- shaking hands
- kissing and hugging
- sharing cups, plates and other eating utensils
- sharing toilet and bathroom facilities
- through coughing or sneezing or through the air we breathe
- sitting in the same class room or canteen
- sharing work instruments or machinery
- swimming together or playing together
- donating blood to the Blood Bank (with sterilized needles)
- bites by insects, e.g. mosquitoes, bed bugs, etc.

One cannot get HIV/AIDS through everyday social contact with a person infected with HIV.



**"Love spreads not HIV"**

## Sexually Transmitted Diseases (STDs)

There is strong evidence that sexually transmitted diseases (STDs) put a person at a greater risk of getting and transmitting HIV. This may occur because or sores and breaks in the skin or mucous membranes that often occur with STDs. There are various types of sexually transmitted diseases. AIDS is only one of the sexually transmitted diseases and knowledge about others is necessary for understanding AIDS.

It is important that sexually transmitted diseases are adequately treated. If not, they can become chronic and be the cause of serious complications. For adequate and effective treatment *it is necessary to go to a qualified doctor.* Self-treatment or treatment by quacks is not advisable. One should not feel ashamed to go to a doctor. It is the doctor's duty to maintain strict confidentiality.

# HIV/AIDS : PREVENTION AND CONTROL

# HIV/AIDS : PREVENTION AND CONTROL

How to prevent and control HIV/AIDS is a very difficult question. There is no preventive vaccine or cure. The only option available today is to prevent it by observing practices that are safe. Compliance with such practices can make a significant difference. The discussion in the following pages, therefore, is focussed on the preventive practices regarding three major routes of HIV infection: Sexual Intercourse; Blood; and Mother to Child.

## Sexual Intercourse

In most cases, HIV infection is caused by unsafe sex practices. A healthy attitude towards sex and observing responsible sexual behaviour can reduce the chances of getting HIV infection. Abstinence from sex not having pre-marital sexual relations, sticking to one life partner and not having multiple sexual relations constitute responsible sexual behaviour which are the best guarantees against HIV/AIDS.

## Use of Condom

Sex plays a very important role in the growth of an individual into adulthood and in his/her subsequent life. Decisions regarding sex must be based on careful and mature consideration. However, in order to prevent HIV transmission, the use of condom is also suggested. The use of condom is recommended not only for avoiding unwanted pregnancy but also as a 'protection' against HIV/AIDS and other STDs. Although the use of condom provides good protection, it should be remembered that it does not make sex 100 per cent safe.

## Blood

Another route of HIV infection is through blood. The following steps may prevent the spread of HIV infection :

a) **Use of only sterilized instruments :** Great care should be taken in using instruments which draw blood and are used in activities such as circumcision, tattooing or ear piercing. These must be sterilized before use and every time when these are to be used again. Instruments can be cleaned by leaving them in a solution of one part bleach* (powder or liquid) to nine parts water (1: 9) for 30 minutes or boiling them in water for 20 minutes.

b) **Sterilized syringes and needles :** One should not get 'injections' from an unqualified doctor. The needles and syringes used by such practitioners are generally not sterile. If an injection is needed, one must ensure that the syringe and the needle are disposable or these are pro-perly sterilized. There should never be any sharing of needles and syringes while taking an injection.

c) **Blood safety :** The Blood Safety Programme in the country is an integral part of the National AIDS Cortrol Programme. There are more than 1000 Blood Banks, both government and non-government, which collect and supply blood.

HIV Zonal Blood Testing Centres have been set up in a number of cities and towns of the country. The centres receive samples of blood from Blood Banks for HIV testing. Under the Drugs and Cosmetics Act, it is mandatory to test every unit of blood for HIV. The Zonal Blood Testing Centres/district level Blood Banks have been provided with testing kits and the necessary equipment for conducting tests. The blood of a donor is discarded, if it is tested HIV positive.

In order to know the prevalence and progression of HIV in the community and in the country as a whole, the mechanism of sentinel surveillance has been established. This is being done through screening of the blood samples, collected from sentinel sites including STD clinics, antenatal clinics, drug de-addiction clinics, etc. The surveillance data drom different States is compiled at the national level.

Efforts are also being made to augment voluntary blood donations and to phase out professional blood donors.

---

* Bleach contains chemicals with oxidising bleaching action such as sodiumhypochloride and chlorine. These chemicals are also good disinfectants and sterilizing agents.

## Mother-to-Child

The risk of an HIV infected mother passing the virus to her unbron child is about 30 per cent, the risk being greater if she has symptoms of AIDS than if she has no symptoms. The risk of passing HIV through breast-milk is relatively small. Breast-milk has many substances that protect an infant's health and the benefits of breast-feeding for both mother and child are well-recognised. Bottle feeding is not safe because of difficulties in sterilizing the feeding bottle or lack of clean water supplies. In developing countries, the risk of an infant becoming infected through breast-feeding is usually outweighed by the benefits of breast-feeding.

A woman who is infected with HIV may wish to consider carefully the pros and cons of pregnancy in the light of the chance of the child getting AIDS. She may or may not decide to have a child, as there is 30 per cent chance of the would be child to get HIV infected.

## "No Risk" Behaviours

The prevention of the spread of HIV depends on the behaviour of individuals. The following "no risk" behaviours are extremely important :

### 1. Responsible Sexual Behaviour :

(a) Abstinence from sexual intercourse before marriage is a "no risk" behaviour. In this context, the traditional value of 'no sex' before marriage and outside marriage is important. Students may be encouraged to discuss the significance of this traditional value in the context of contemporary situation. Abstinence is a responsible behaviour and students need to discuss the reasons for observing abstinence and learn how to resist pressures.

(b) Sex with one and mutually faithful partner is another "no risk" behaviour. In this context, it is important to note that this is in consonance with the Indian value which discourages pre-marital and extra-marital sexual relationships.

### 2. Sterilized Needles/Syringes :

In no case needles/syringes should be shared. Only sterilized/disposable needles and syringes should be used for all purposes.

3. **HIV Test :**

It must be ensured that HIV test is done before blood transfusion if and when necessary.

## "Risky" Behaviours

The following behaviours carry the risk of HIV infection.

- Not sticking to one partner or having multiple sex partners.
- Having sex with a person who has multiple sex partners.
- Sharing unsterilized needles and syringes. accepting untested blood transfusion.

# SEXUALLY TRANSMITTED DISEASES

# SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases (STDs) are usually contracted through sexual relations. These diseases affect sexual organs and can seriously affect the entire health of the individual. Most STDs are easy to treat. If they are detected and treated early, they do not cause serious problems. If they are not detected and treated early, the infection may spread and cause complications such as sterility. STDs are relatively easy to contract, and so it is important to know what they are, what they look like and what we need to do to get them treated. STDs are also known as venereal diseases.

## STDs : a social as well as medical problem

There is still a lot of social stigma attached to STDs. People are often afraid and ashamed of seeking help in the clinic. In the past it was difficult to get treatment without harrassment. However, this situation is gradually changing.

## STDs : Symptoms

STDs often have very few symptoms. A person may be infected for some time and not know it. The danger is that the person can spread the disease to others without realizing it. The following describes some common STDs and how they are treated.

## 1. Gonorrhoea

Symptoms occur 3-5 days after infection. In men, it causes a yellow/ green discharge and pain on urination. Women may also have a vaginal discharge. Both women and men may have no symptoms at all.

**Treatment :** Both partners must take the treatment and not have sexual intercourse until the treatment is finished.

**Risks :** If the infection is not detected and treated, it will spread and may cause sterility in both males and females. There are some strains of

gonorrhoea that are resistant to certain antibiotics, so it is important to be treated by a qualified health worker/doctor to ensure proper treatment.

## 2. Chlamydia

It is caused by a bacteria. Often there are no symptoms. The infection may lie dormant for sometime and then start to cause problems. The symptoms include a discharge or burning sensation when urinating. It may occr together with gonorrhoea.

**Treatment :** It is very important that both partners are treated and that they avoid sexual intercourse until they have finished the treatment.

**Risks :** If Chlamydia is not treated, the infection may spread causing inflammation in the womb and sterility. It is a very common infection.

## 3. Syphilis

The first sign of infection is a small painless ulcer, ***chancre*** at the site of infection, usually the sexual organs or the mouth, which appears between 9 and 90 days after infection. This disappears in a few days and may not be detected. The infection lies dormant in the body for some time. Later a red rash may appear all over the body. This also can pass undetected.

**Treatment :** Both partners need to be treated and they must not have sexual intercourse until the treatment is finished. If the small ulcer is not detectable, a blood test may be taken to detect whether infection has taken place.

**Risks :** If syphilis is left untreated, it can cause major problems in the later life. Heart disease is not uncommon in the terminal stages. Dementia is caused by infection in the brain. Women may pass on syphilis to their unborn child and this causes congenital abnormalities in the baby. Treatment can be taken at any time once syphilis has been detected, but the cure is more successful and the treatment is shorter, if detected early.

## 4. Chancroid

This infection causes small, usually painful ulcers on or around the genital organs. The ulcers tend to grow in size, and these will not heal without proper treatment.

**Treatment :** Both partners need to be treated and they must not have sexual intercourse until they have finished the treatment and are cured.

## 5. Herpes

It is caused by a virus. Herpes lives in the nerve root endings and once infected a person is infected for life. The first attack after infection is often the most painful. Small blisters occur around the site of infection, the mouth or the qentials, between 2 and 20 days after infection. The blisters may be accompanied by a high fever, general aches and pains and swollen glands. The blisters burst after about 2 to 4 days and eventually heal. Attacks occur about 3 to 4 times a year for many years but gradually decrease in intensity.

**Treatment :** There is no cure for herpes. The sympotms can be reduced by bathing the blisters in warm salty water and by taking painkillers. It is important to avoid sexual intercourse until the blisters have completely disappeared. To avoid spreading the infection, the sufferers should make sure that they keep their own towel and avoid contact with their eyes without washing their hands.

**Risks :** Pregnant women can pass the infection on to their unborn baby. Herpes may infect the brain and cause serious damage to the new born child.

## 6. Trichomoniasis

Women complain of a smelly discharge, itching and soreness. Men usually have no symptoms at all. Symptoms start between 2 and 3 days after infection.

**Treatment :** Both partners need to be treated. No sexual intercourse should take until the treatment has finished.

## 7. Candidiasis

This is an infection of the vagina, caused by a fungus. It causes a whitish discharge, and itching in the vagina. Candidiasis infection is not always sexually transmitted and can occur spontaneously.

**Treatment :** Vaginal tablets with an anti-fungal drug may be taken with the advice of a medical practitioner.

## 8. Condyloma

Condyloma is caused by a virus. It causes warts which appear on or around the sexual organs. These flesh coloured bumps can be very difficult to identify, especially if they appear in the birth canal of a woman. They usually appear 3 to 9 months after infection. This long incubation period means that it is difficult to find out where they come from. They can be passed on to others.

**Treatment:** The warts are painted with a solution called podophyllin. The solution must be washed off after 4 hours to avoid irritation. No sexual intercourse should take place until the warts have completely disappeared. Both partners need to be checked to see if they have any warts.

**Risks :** Women who have come in contact with the Condyloma virus should have their uterus checked regularly for the first stage of cancer. The Condyloma virus is very common.

It is important that sexually transmitted diseases are adequately treated. Otherwise they can become chronic and cause serious complications. For adequate and effective treatment it is necessary to go to a qualified doctor. Self-treatment or treatment by quacks is not advisable. One should not feel ashamed to go to a doctor.

### Prevention

A. **Restrict sexual activities :** The epidemic spread of sexually transmitted diseases is largley due to increasing numbers of persons having multiple sexual partners.

B. **The use of mechanical barriers :** Condoms prevent skin-to-skin contact and are thus helpful in preventing the transmission of some of the sexually transmitted diseases.

C. **Local agents :** Some of the contraceptives and vaginal creams, foams and jellies help reduce the chance of acquiring STD. None are proven effective, and there is no reliable information on dosage and timing of applcation. Washing with soap and water before and after sex is an important deterrent to the spread of STD.

D. **Change in attitude :** If people are knowledgeable in signs and symptoms of STDs, they will seek early diagnosis and treatment, inform their partners of the necessity for treatment and refrain from sex until they know that they are no longer infectious.

# DRUG ABUSE : CONCEPTS AND CONCERNS

# DRUG ABUSE : CONCEPTS AND CONCERNS

## What is a 'Drug' ?

A drug is a chemical substance that changes the way our body works. When a pharmaceutical preparation or naturally occurring substance is used primarily to bring about the change in some existing process of state (physiological, psychological or biochemical), it can be called a 'drug'. Thus, any chemical that alters the physical or mental functioning of an individual is a 'drug'.

## What is 'Drug Abuse' ?

When drugs are taken for reasons other than medical in an amount, strength, frequency or manner, that damages the physical or mental functioning of an individual, it is 'drug abuse'. Any type of drug can be abused. Drugs with medical uses can be abused in the following ways :

- **Too Much** : When an increased dose of any drug is taken without medical advice, it will be a case of drug abuse, for example, the incidence of taking 10 milligram of valium when only 2 milligram has been prescribed.
- **Too Often** : When small doses of any drug are taken frequently without medical advice, for example, taking the drug more than once when it has been prescribed only for bed-time.
- **Too Long** : When the drug is taken for an extended period of time, longer than the prescribed one, for example, continued use of the drug for months when the Doctor has prescribed its use only for a fort-night.
- **Wrong Use** : It will be wrong use of a drug, if it is taken for reasons other than medical, or taken without medical advice, for example, taking *gardenol* (an anti-epileptic drug) for the sedative side-effects, which is dangerous.

- **Wrong Combination** : If a drug is taken in combination with other drug or any other intake without advice, it will be harmful, for example, taking *barbiturates* (a depressant drug) with alcohol to enhance the effect.

- **Illegal Drugs** : Besides the medically prescribed drugs, there are certain illegal drugs like brown sugar, marijuana, ganja and charas, that have no medical use at all. With these drugs there is no 'drug use' but only 'drug abuse'.

## Why Drug Abuse ?

There is no single reason why people practice drug abuse. As generally observed, most of the drug addicts start using drugs out of curiosity or to have some wrongly assumed pleasure, quite often under the influence or pressure of some friends and peer group. Some take to drugs as they wrongly believe that it will help them overcome their boredom, depression and fatigue. It has also been found that some persons start taking drugs because of the lack of love and understanding on the part of those who have been very closely attached to such persons. Most of the drug-addicts are found to suffer from frustration in life. Of course, the easy availability of dependence-producing drugs is a major factor in the proliferation of drug abuse.

Adolescents are particularly more at risk for drug abuse because of the folowing factors. They take to drugs quite often under peer pressure. Many of them are given to believe that everybody takes drug in some from or the other. To begin with some of their school mates and friends prompt and persuade them to start smoking or taking tobacco and alcohol. From this stage they are further driven to take other dangerous substances. Some of them who have problems at home or school are made to believe that taking to drugs will relieve them of their problems and frustrations in life. They also think that if they do not pay heed to the request of their peer group, they will not be liked by the group and they may lose their friends. Moreover, their temptation 'to look and behave like adults' and their tendency to refuse any kind of authoriative elderly advice encourage them to move in this direction. At times mere curiosity

drives them to take to drugs.Some of them think that taking drugs once will not make any difference. But they become habituated of smoking or taking tobacoo or alcohol and other substances very soon.



**Peer Pressure**

Adolescents in India are equally vulnerable. According to the India Drug Country Report, 1995, most of the drug abusers are between 16 and 35 years of age, and among 18-35 age-group the drug abuse is more predominant. Whereas the rate of current abusers is low during early adolescence, it rises sharply during late adolescence and remains high in early twenties.

## Symptoms of Drug Addiction

It is not very difficult to know whether a person has become a habitual smoker. However, it takes some time to immediately identify a drug addict. It is not so easy to distinguish between drug-induced behaviour and common behaviour particularly among adolescents. But there are certain symptoms on the basis of which it can be suspected that a person is a drug addict, though all the symptoms do not appear in every person. The following symptoms are noteworthy :

## Physical Symptoms :

- Reddening and puffiness of eyes, unclear vision
- Running nose, congestion, coughing
- Pale face, circles under eyes
- Slurring of speech
- Nausea, votiming, bodypain
- Messy appearance, lack of cleanliness
- Drowsiness or sleeplessness, lethargy and passivity
- Loss of appetite, significant weight loss or gain
- Fresh numerous injection sites on body, blood stains on clothes

## Behaviour Symptoms:

- Changing mood, temper, tantrums, hostility, defiance
- Actue anxiety, depression, profuse sweating
- Blaming, lying, making excuses, emotional detachment
- Loss of interest in sports and daily routine
- Impaired memory and lack of concentration
- Secrecy in respect of possessions and actions

## Performance Symptoms :

- Withdrawal from family environment and non-participation in family work.
- Sudden lowering of grades in schools, non-completion of home work, absenteeism
- Presence of needles, syringes and strange packets at home
- More time spent in personal room, in the bathroom or away from home

## Drug Dependence

Drug abuse leads to drug addiction with the development of ***tolerance*** and ***dependence.*** *Tolerance* refers to a condition where the user

needs increasing amount of the drug to experience the same effect. Smaller quantity that was sufficient earlier becomes ineffective, and hence the user is forced to increase the amount of drug intake at regular intervals. This is referred to as the state of *dependence*. Regular excessive use of drug leads to physical and psychological dependence. Some drugs produce only physical dependence while others produce both physical and psychological dependence.

## Psychological Dependence :

When psychological dependence develops, the drug user gets mentally *'hooked on'* to the drug. The drug user constantly thinks only about the drug and has a continuous uncontrollable craving for it. This state of euphoria is characterised by mental and emotional preoccupation with the drug.

## Physical Dependence :

Physical dependence denotes a state when the body of the user requires continuous presence of the drug within it. With prolonged use the body becomes so used to its functioning under the influence of drug that it is able to function normally only if the drug is present. After the user becomes physically dependent on drugs, he or she develops *withdrawal symptoms,* if the intake of drug is abruptly stopped. In a sense the body becomes confused and protests against the absence of the drug within it. The withdrawal symptoms may range from mild tremors to convulsions, severe agitation and fits, depending on the type of drug abuse. The intensity of withdrawal symptoms depends on the type of drug abused and the amount and duration of drug intake.

These withdrawal symptoms make it difficult for the user to give up drugs. The user is caught up in a vicious circle of his/her own making. He/she wants to avoid the experience of seemingly unbearable withdrawal symptoms, and hence takes drugs. The addict is thus forced to continue with drug abuse even when he/she realises that the drugs are dangerous.

## Classification of Abused Drugs

Drugs that are abused may be classified into the following five basic groups :

| Group | Drugs | Effect that user fe |
|---|---|---|
| **Stimulants** | Amphetamines like Benzedrine, Dexedrine and Methedrine, Cocaine, Nicotine, Tobacco | accelerate the br (central nervo system) |
| **Depressants** | Alcohol, Barbiturates like seconal, nembutal, gardenol, Tranquilisers like valium and librium | slow down activ of the brain |
| **Sedatives** | Hypnotic like mandrax, doriden | hypnotic effects |
| **Narcotic/ Analesics** | Opium, Morphine, Codeine Heroin, Brown Sugar, Synthetic drugs like Methadone, Pethidine, Mephradine | produce opium li effects and stup feeling |
| **Cannabis** | Bhang (Marijuana), Ganja, Charas | |
| **Hallucinogens** | LSD (lysergic acid, diethylamide) PCP (phencyclidine), Mescaline, Psilocybin | distort the way we see, hear and feel |

## Effects of Drug Abuse

Drug abuse leads to a number of short-term and long-term effects that are detrimental to health.

**Short-term Effects :** These are the effects that instantly appear only a few minutes after the intake of drugs. The drug abuser feels a false sense of wellbeing and a pleasant drowsiness.

**Long-term Effects :** Drugs have long-term impact that lead to serious damages because of the constant and excessive use. The damages include both physical and mental, making the life of the user unbearable and hellish.

## Some Common Myths About Drug Intake

There are certain commonly prevalent myths that encourage individuals and particularly the adolescents to take to drugs. These are :

| Myths | Facts |
|---|---|
| There is no harm in trying drugs just once, because one can stop after that. | Almost all drug addicts start by trying just once. Once the drug is taken, the user is always amenable to further drug intake, which becomes a part of his/her habit. |
| Drugs increase creativity and makes the user more imaginative. | Drug addict loses clarity and becomes incoherent in action. |
| Drugs sharpen thinking, lead to greater concentration and increase sexual pleasure. | Drugs induce dullness and adversely affect normal functioning of body and mind. Drugs may remove inhibitions but temporarily. |
| Will power alone can help a drug addict stop taking drugs. | Addiction transforms into a disease which requires medical and psychiatric treatment. |
| Most of the addicts get their drugs from a peddler or a pusher. | Most of the addicts get their first dose of drugs from a friend or a close associate. |

## Prevention of Drug Abuse

One can keep oneself away from drug abuse. Our sociocultural environment does not approve it. Even when people take tobacco or smoke or drink, they realise that it is not an appropriate action. But it must be taken note of that almost all young people are at risk for drug abuse. Attitudes concerning smoking, drinking and other drug abuse are formed early, usually during preadolescence and early adolescence. And hence the interventions for prevention must begin early. Parents and teachers can play decisive roles in helping childring cultivate proper attitude towards drugs and remain away from drug abuse.

## As a Parent

Parents have the most important influence on their children. In spite of the fact that children today are exposed to various factors, parents continue to be role models for an overwhelming majority of them. Parents can make the following efforts :

- Communicate openly with your child and be a patient listener. Build a close relationship by conversing with your child and try to understand and respect his/her point of view.
- Keep yourself interested in your child's activities and friends. Try to make him/her aware of the implications of peer pressure and how to deal with if tactfully.
- Help your child to develop self-confidence. Try to examine his/her behaviour carefully and be critical to actions and not the person.
- Share with your child the problems at home and try to know his/her own problems. The child should be encouraged to participate in the solution of domestic problems and also to solve his/her personal problems.
- Help your child appreciate values and norms and try to inculcate in him/her respect for such socio-cultural values that would keep him/her away from drugs.
- Parents are the best role models for their children. Set an example before your chilld by not taking drugs yourself. Remember that your actions speak louder than your words.
- Learn as much as you can about drugs. If unfortunately your child has fallen victim to drug abuse, try to tackle the problem with great care.

## As a Teacher

- Whenever you get appropriate time, while teaching or informally, discuss with students the problem of drug abuse.
- Keep yourself interested in your students' activities and their interests. Observe continuously their behaviour within and outside classroom.

- Encourage them to volunteer information of any incidence of drug abuse. Encourage discussion among them on the issue of drug abuse. Try not to pontificate and do not adopt the didactic approach while moderating the discussion.

- Try to share the problems, academic and personal, of your students and guide them on how to handle their problems. Be careful in advising them and try not to make any value judgement on their views and actions.

- Help them examine their career options and encourage them to set goals and achieve those goals.

- Learn as much as you can about drugs. If unfortunately any of your students has fallen victim to drug abuse, try to tackle the problem with great care by cooperating with his/her family.

### As a Citizen

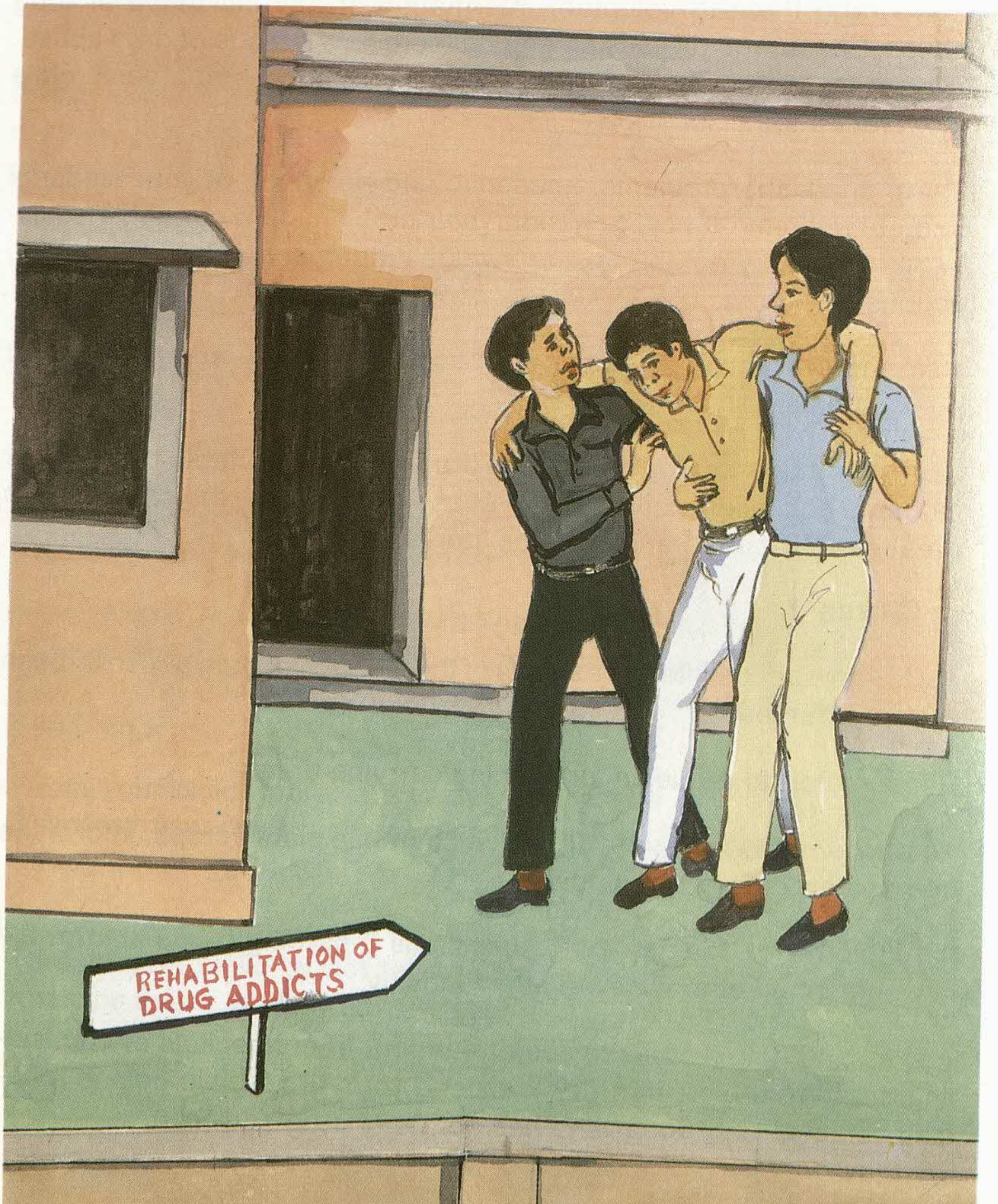
- Try to know about different aspects of the menace of drug abuse through various sources.

- Remain alert to requests for keeping/carrying drugs.

- Whenever and wherever you notice cannabis plants/crops, inform the nearest law enforcing authority.

- If you come across any thing suspicious regarding drugs, inform the law enforcing authority, even anonymously.

- Advise and help addicts to seek treatment from hospitals or counselling/de-addiction centres. Try to extend your all possible help in rehabilitation of an individual who has got rid of drug addiction.




**Drug abuser needs humane care**